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THE EXCAVATIONS AT PANDU RAJAR DHIBI

DIRECTORATE OF ARCHAEOLOGY, WEST BENGAL

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THE EXCAVATIONS AT PANDU RAJAR DHIBI

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A concise Report Of Archaeological Diggings On The Mound In 1962, '63 & '64 and Other Explorations in The Ajay Valley in West Bengal.

A BULLETIN OF THE DIRECTORATE OF ARCHAEOLOGY, WEST BENGAL, NO. 2.

COVER

Representing chalcolithic antiquities from the site
—after paintings by Sri Prankrishna Pal

K. N. DAS GUPTA
MINISTER
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WEST BENGAL

The excavations at Pandu Rajar Dhibi as conducted by the Directorate of Archaeology of West Bengal in 1962, '63 & '64, have indeed revealed the existence of a civilisation in the Ajay Valley in the 2nd millennium B.C. when, as it appears, Bengal had maritime contacts with the Red Sea coasts and the Aegean world. Such a chalcolithic culture is no doubt unfolding a new chapter in Indian pre-history and the excavated painted wares and copper ornaments express the delights of a golden age. The excavations have not only revealed that the earliest civilised men of the Ajay Valley practised cultivation of rice about 3,500 years ago, but they have also brought to light the existence of a city or town in proto-historic times beneath the mounds of Pandu Rajar Dhibi. The excavated pottery, terracotta sculptures, sealings and iron swords from the site will throw a new light on the annals of proto-historic eastern India. The systematic explorations conducted by the Directorate of Archaeology in West Bengal, have shown that the civilisation once spread up in the entire valley of the Ajay and its tributaries and cast its light even to the eastern banks of the Bhagirathi not far away from Tamralipta on the Rupnarayan.

Let more materials come out by further diggings and explorations on both sides of the Ajay, Kunoor and the Kopai as also in the deltaic Bengal.

K. N. Das Gupta
5. 9. 64



Preface

Sri B. B. Mandal, I.A.S.
Joint Secretary,
Public Works Department,
West Bengal.

Indeed it is a pleasure to realise the surpassing importance of the recent excavations and explorations in the Ajay valley which have opened up a new horizon of a hitherto unknown proto-historic civilisation in the lateritic plains and terraces in Burdwan and Birbhum districts in West Bengal. While the diggings at Pandu Rajar Dhibi conducted by the Directorate of Archaeology of the State have revealed the relics of a civilisation probably appertaining to the second half of the 2nd millennium B. C., similar antiquities have also been recovered from various other mounds on both sides of the river far and near. Apart from the practice of human burials and evidences suggesting the existence of an urban civilisation in the Copper Age, the repertoire of excavated antiquities from the site includes a number of materials with enigmatic traits of the ancient art of the Aegaean world as supposed by Sri P. C. Dasgupta, the author of this book. It is also a pleasure to observe that the proto-historic painted potteries from here often recall the chalcolithic pottery of Central India and Rajasthan. It is still to be determined how far the stone tools recovered from the terraces and glacis of the rocky terrains of West Bengal serve as a background to the ultimate development of the refined chalcolithic civilisation of Pandu Rajar Dhibi. I believe that this treatise containing fruits of long research will captivate scholars and general readers alike.

5th November 1964

B. B. Mandal

Joint Secretary to the
Government of West Bengal.

Introduction

he relics of a proto-historic civilisation as discovered in the Valleys of rivers Ajay, Kunoor and Kopai will reveal that still a great amount of mystery remains unsolved regarding the origin of civilisation in eastern India. The varied topography of Bengal include fertile river banks, broken coasts as also arid tracts with galleries of hills and knolls and patches of dense forests of lofty *sal*. The systematic explorations carried out by the Directorate of Archaeology of West Bengal in the lateritic terrains of this State covering the valleys of the Suvarnarekha, Kansavati, Jaypanda, Silavati, Damodar, Kunoor, Ajay, Kopai, Brahmani, Nangasai and others have effected discovery of enigmatic stone tools of the past from the remote Palaeolithic down to the neolithic times besides bringing into light primitive fortifications of unknown inspiration. Inspite of densest jungles an explorer after taking considerable hardship may view at the colossal defence on the cliff of Rangamatia over-looking the ancient Suvarnarekha whose hewn stone-blocks may recall some of the Hittite monuments of distant Anatolia. Although such comparisons are futile without further materials at hand, the proto-historic mounds of the Ajay Valley in Burdwan and Birbhum districts are new yielding evidences of a civilisation as early as the 2nd millennium B. C. when, further, as it appears Bengal had contacts with the Aegaean coasts

perhaps linked up by the Gulf of Aqaba where Nelson Glueck has done his brilliant explorations revealing more accounts of the port of Ezion Geber wherefrom in 10th century B. C. Solomon and his Phoenician allies sent vessels to distant Ophir fascinatingly located in the remote corners of vast areas from Africa to the Malay peninsula across the Bay of Bengal. Indeed, the excavations on the mounds of Pandu Rajar Dhibi in the vicinity of Bolpur as carried out by the Directorate of Archaeology of the State have revealed for the first time the relics of a chalcolithic civilisation forgotten and buried under the earth centuries before the preamble of historic times though certain Jaina texts may refer to a place named *Paniyabhum* or *Panitabhum* in connection with Mahavira's itineary to *Vajrabhumi* in Rahra in West Bengal as early as the 6th century B. C. which might suggest of trade, the *Rig Vedic* word *Pani* (i, v, vii, viii & x) being sometimes explained as meaning traders as in Arabia and Northern Africa or identified with the name of the Phoenicians. These diggings in the type-site of the Ajay Valley have shown that the early civilised settlers were users of pre-geometric microliths, bone-tools, copper ornaments and painted pottery of surpassing aesthetic value. The most significant of all were the practice of human burials, the well-established custom of their east-west orientation, as also the use of channel-spouted bowls with splayed ends of their spouts and elegant vessels of black-and-red ware resembling an inverted helmet or flower pots. Further, explorations undertaken by the Directorate have revealed that the human culture developed from the Old Stone Age on the banks of the Ajay, the Palaeolithic industry of fossil wood and quartzite on the detrital laterite at Bonkati near Pandu Rajar Dhibi and Ilambazar bearing reminiscences of a probable link with the practice of the Anyathians in Burma and the tool-types of the Suvarnarekha Valley which represent the tradition of the Sohan complex and tools of its comparable horizon in eastern Asia. In view of all these fascinating problems of pre-historic

archaeology in Bengal this book is produced to describe in summary the cultural phases of Pandu Rajar Dhibi in the context of the distribution of chalcolithic mounds on both sides of the Ajay river referring to the nature of finding besides the occurrence of palaeoliths at the important site of Bonkati as mentioned. A short account of the recent diggings at Goswamikhanda has also been added to reveal some trends in the art of building enigmatic structures in later times. Apart from giving due credit to the Superintendents Sri D. K. Chakravarty and Dr. S. C. Mukherji of this Directorate for brilliantly assisting the writer in excavations and collaborating in various explorations as planned, it is pleasant to acknowledge with grateful thanks the excellent works rendered by Sri K. Majumdar and Sri P. N. Malakar of the staff without which the classification of numerous antiquities and pottery as also the publication of this book before commencing our further excavations in the Ajay Valley at the end of 1964 might be difficult. Again for the careful digging at the human cemetery of the site some credit should be given to our Draftsman Sri E. D. Sampson for his most useful works in the field apart from the expert services of Sri Anadi Pal and Sri Bimal Kumar Dutta of the Anthropological Survey of India for preserving and lifting the skeletons as laid bare. Actually the entire staff of the Directorate worked hard in digging in spite of severe storms after the Springs of 1963 and '64 when tents were often blown out and rent into shreds apart from causing much damage to the sections of arduously cut trenches. Further, it is a pleasant obligation to acknowledge with thanks the generous collaborations from the Archaeological Survey of India, Eastern Circle as also the Anthropological, the Geological and the Zoological Survey of India. The human skeletons from the cemetery level of Pandu Rajar Dhibi are now under the examination of the Anthropological Survey of India at Calcutta whose former Director Prof. N. K. Bose has given his learned attention to the work besides our availing of the expert

observation of Dr. D. Sen, its present Director and Sri P. Gupta, Anatomist who obliged us by studying the skeletons *in situ*.

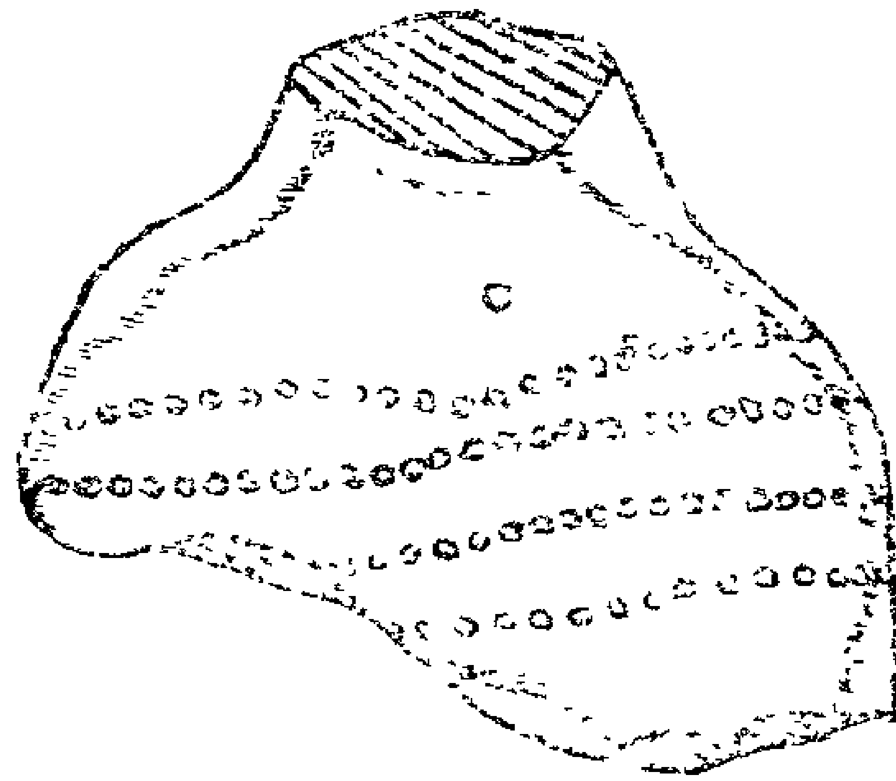
Thanks are also due to Dr. H. D. Sankalia, Director of Deccan College Post Graduate Research Institute, Poona, Sri B. B. Lal, Director, School of Archaeology, New Delhi, and Dr. Y. D. Sharma, Deputy Director of Archaeology in India for their very kindly visiting the site and giving valuable suggestions. It was Dr. H. D. Sankalia who first announced the proto-historic importance of Pandu Rajar Dhibi before an international gathering of archaeologists in New Delhi during the Cenetenary of Archaeological Survey of India in December, 1961.

Apart from the excavator's indebtedness to Dr. Shyamadas Chatterjee, D.Sc., F.N.I., Head of the Department of Physics in Jadavpur University of Calcutta for his learned Radio-Carbon examination of an excavated charcoal sample from the level of Period II of the site, grateful thanks are expressed for the generous encouragements coming from Sri V. S. C. Bonerji, I.A.S., Commissioner, Burdwan Division and the District Officers of Burdwan and Birbhum. Further, whatever success has been achieved in excavations and explorations in the Ajay Valley that is entirely the effect of the kind patronage of the Government.

P. C. Das Gupta,
Director of Archaeology,
West Bengal.

33, Chittaranjan Avenue,
Calcutta-12.
Dated the 29th January, 1964.

Excavations at Pandu Rajar Dhibi



The ancient mounds of Pandu Rajar Dhibi in the Valley of the river Ajay in Burdwan district have revealed for the first time in eastern India the evidences of a proto-historic civilisation which seemingly appertains to a chronological horizon in the second millennium B. C. if not to earlier times. As a matter of fact, the archaeological relics from the site are surpassing in their importance being comparable with similar findings from Central India, Rajasthan, Maharastra and lands in more distant West referring to the civilisation of Anatolia and the Aegaean world. Further, now one has to consider whether the proto-historic culture of Bengal being traceable in the Ajay valley had contacts with lands beyond the Sea by maritime routes ?

The mounds of Pandu Rajar Dhibi (Lat. 23° 35′ & Long. 87° 39′) stretch from east to west on the southern side of the river Ajay in Burdwan district of West Bengal the main routes of communication being from the railway station of Bhedia before Bolpur from Calcutta and from Panagarh across Radhamohanpur and Ramnagar. While the distance of about six miles between Bhedia and the archaeological site has to be covered by buffalo cart, the alternative journey though makes a long detour can be performed by automobile comfortably in dry season.

Indeed, the chalcolithic civilisation of Pandu Rajar Dhibi has a remarkable geological and archaeological back-ground. The reddish soil-formation with laterite outcrops and occasional knolls and hills that extend from Midnapur to Birbhum among others appears to be very ancient and a few fossil woods from Birbhum have been studied by Sri M. V. A. Sastry, Palaeontologist-In-Charge, Geological Survey of India, Calcutta and they have been found to be comparable with the fossil-wood recorded from the Tertiary horizon probably Miocene 14 million years ago. In such a geological and palaeontological context a number of unifacial pebble-tools of quartzite comparable with similar ones from the Himalayan Ice Ages including those from the well-known Sohan valley have been discovered in the basin of the Suvarnarekha and the Pitanau in Midnapur district, and palaeolithic Abbevelio-Acheulian hand-axes and tools of Series II were found in the valleys of the Kansavati and the Mayuraksi, apart from the numerous microlithic tools, flakes and cores lying scattered in a wide zone and recovery of polished neolithic celts amidst old alluvium and hills of West Bengal. The proto-historic remains of Pandu Rajar Dhibi belong to such a chain of evolution of human culture and they throw a new light on the chalcolithic civilisation of Bengal which seems to have developed in the basin of the Ajay somewhere in the 2nd millennium B. C. As a matter of fact, systematic explorations and excavations at the site undertaken by the Directorate of Archaeology of West Bengal have placed the valleys of the Ajay, Kunoor and the Kopai in Bengal in the archaeological map of the diffusion of Copper and Bronze Age civilisation of Asia (Plate II).

Though mainly well-known for several historic ruins (among others Sri Chandika Prasad Banerji once drew our attention to such relics of the locality) in the surrounding area the proto-historic importance of the mounds of Pandu Rajar Dhibi remained long unknown in the absence of any sustained exploration to be done by a pre-historian. Apart

from local legends of a certain king named Pandu whose palace is said to have been buried in the core of the main mound, the chalcolithic treasures of the area were never recognised until the year 1961 when Sri D. K. Chakravarty and Dr. S. C. Mukherji, Superintendents of the Directorate of Archaeology of West Bengal explored the mounds and brought to Calcutta examples of black-and-red ware, a few microliths and a single fragment of a bowl of lustrous red ware bearing a painted design in black which obviously seemed to belong to a hitherto unknown proto-historic civilisation. The explorations were continued after a study of the materials and field works as now done by the writer and the Superintendents resulted in discovery of fragments of beautiful channel-spouted bowls of black-and-red ware of undoubted proto-historic origin as also other significant examples of painted black-and-red and lustrous red wares, perforated pottery, microliths, neolithic celts, beads, of semi-precious stones and a few bits of copper. These antiquities proved that the site was first inhabited long ago in proto-historic times and a strange affinity between some of these findings and those from Central India and Rajasthan indicated the possible chronology of the civilisation somewhere in the 2nd millennium B. C. As a sequence of such discovery attention of experts were drawn to the unique importance of the mounds which were kindly visited by the eminent prehistorian Dr. H. D. Sankalia, Director of Deccan College Post Graduate and Research Institute, Poona in the month of January, 1962. While Pandu Rajar Dhibi was immediately recognised to be a proto-historic site of outstanding importance mainly due to its distance of about a thousand miles from the analogous chalcolithic sites of Central India and Rajasthan, the State Directorate of Archaeology made preparations for an excavation at the site besides undertaking extensive explorations in the Ajay Valley.

The trial digging carried out in the Spring of 1962 revealed many an interesting aspect and it was noticed that the earliest

inhabitants of the area lived on an earth-surface of mottled sandy silt more than 12′ (feet) below the surface of the back of the mound. While the first inhabitants appeared to be a simple agricultural people who lived in mud houses and had an industry of hand-made grayish or pale red pottery of thick fabric bearing impressions of paddy-husks, the phases immediately after showed traits of an urban civilisation whose general equipments included painted black-and-red and lustrous red wares, channel-spouted bowls of graceful form and bright red outer surface like glowing ember, perforated pottery and various objects. The impressions of husks in the pottery-fragments of Period I were scientifically analysed by Sri A. K. Pal, Economic Botanist to the Government of West Bengal, Directorate of Agriculture and they were identified as those of cultivated paddy *(Oryza Sativa L. Graminae)*. In this case the antiquity of the cultivation of rice in Bengal goes back to the 2nd millennium B. C. It seemed even possible that the cultivation of rice in China was once derived from Bengal where the staple food gradually substituted millet in proto-historic time supposedly in the middle or earliest half of the 2nd millennium B. C. as it is known from a study of husk-impressions on a sherd from Yang-Shao Tsun, "the classic site of Honan painted pottery" (Graham Clark: *World Prehistory—An outline*, Cambridge, 1961, P. 202). Apart from the impressions of paddy-husks which bear witness of rice cultivation in this part of Bengal in the 2nd millennium B. C., the contemporary and later wheel-turned and artistic ceramics seem to disclose an era of immigration of a people who lived in a chalcolithic civilisation besides the evidence of painted or simple channel-spouted bowls which recall similar specialised wares from the proto-historic Narmada valley and Rajasthan in India and the more distant countries of Iran and the eastern Mediterranean world wherefrom comparable excavated pottery or a lime-stone tray belong to ancient epochs several thousands of years ago. The black-and-red wares appertaining to the proto-historic phases

of Pandu Rajar Dhibi are occasionally painted with oblique strokes, dots, hyphens, chevrons etc. in translucent white pigment on the inner side though there are small carinated vases with flaring rim as typical of the age which are found to be painted with a row of curved strokes in creamish paste on the shoulder. The lustrous red wares on the other hand have a very smooth surface and a fabric distinct of Ajay culture (Plates XXXVIII, XXXV, XLII & XXII) The paintings occuring on them on one side or occasionally as it were on both sides are generally touched in black or in grayish white pigment the designs being mostly geometric or conventional patterns like solid triangles hatched diamonds, simple bands, stepped chevrons, lattices, dots, laddders and wavy lines. While the black-and-red ware was mainly represented by knife-edged or lipped bowls and small carinated vases with bevelled rims, as also high-necked jars showing pairing technique, the examples of painted red ware included shallow bowls and basins with extended rims besides footed cups or beakers, bowls-on-stands and other forms. In all five Periods were noticed in the excavation of 1962 and the proto-historic pottery and other antiquities came from the first three Periods ending and sealed up in the main mounds by accumulation of ashes of a conflagration of unknown origin. Although a few implements of iron including a long celt and an arrow-head with a hollow tang (Plate XIII) were unearthed from the level of Period III, the metal was totally absent in Periods I & II when copper was known. If Period III goes around first millennium B. C. this emergence of iron will not be surprising as the metal was once used by the Hittities and the Philistines of Western Asia in the 2nd millennium B. C., while objects of iron were even found in the grave of Pharao Tutankhamen of Egypt apart from its occurrence in proto-historic Troy in Asia Minor, Sialk in Iran and Alamgirpur in India. Being situated in the vicinity of the iron-producing area the mounds of Pandu Rajar Dhibi offers a new problem in Indian archaeology though the

cause of such occurrence of carbonised iron here (examined by Sri Tarun Bagchi of Calcutta) may be attributed to an age of transition if not to the coming of invaders who could be responsible for the last conflagration. In this connection it may be pointed out, that. recently Sir Leonard Woolley had expressed his conviction that Rigvedic Aryans knew the preparation of steel (*ayas*) though there is another opinion that primitive *Asurs* of Chotanagpur plateau once instituted the metallurgy of iron and from them the knowledge was transmuted to the Vedic Aryans. Whatever might be the precise position of iron in the chronology of Pandu Rajar Dhibi, the excavation in the year 1962 revealed in proto-historic levels the smooth lime-plastered floor of a fairly spacious room or a hall as also a curved pavement of beaten terracotta nodules with post-holes besides diagrammatic rows of lime-plastered ovens resembling those from at *Navda Toli* in Central India. As a trench dug at a considerable distance revealed the same sequence along with a small scraper of stone and a microlithic flake of green jasper it could be presumed that the proto-historic habitation once spread up over a considerable area. By a further careful study it may be said that the upper levels above a thick layer of ashes overlying Period III belong to an early age though later pits were recognised here and there. The foundations of brick-structures and thick storage vases evidently bear evidence of an altogether different culture beginning from early historic times.

In order to have a clearer view of the proto-historic culture of *Pandu Rajar Dhibi* a more elaborate excavation was taken up at the site in the beginning of 1963 by the Directorate of Archaeology and the digging was inaugurated by Sri K. N. Das Gupta, Minister-In-Charge, Public Works Department, Government of West Bengal on the 3rd February of the year. The excavation (Plate VI) conducted like that of the last year by the writer being assisted by Superintendents brought to view various evidences of the Past beginning from the chal-

colithic times down to the historic age after the afore-mentioned conflagration of unknown origin. The season's work was done with minute care and the members of the staff of the Directorate had been credited with a new responsibility of digging the first proto-historic site in entire eastern India as it was in the previous year They had to record among other antiquities painted pottery, microliths and copper ornaments and had to deal with human burials not unlike many of these of the various Bronze Age civilisations of the ancient world. The excavation in the year 1963 revealed four Periods the last one having two phases. So the sequence of the last year was slightly revised in the light of further stratigraphy on a much larger scale.

Period I commenced from a very early period when the inhabitants of the area lived on the surface of mottled sandy silt and practised human burial with east-west orientation, i.e. the head was turned to the east. While the burial might be of fractional type as the upper part of the skeleton was missing, the very nature of inhumation within the mottled sandy silt seemed to be striking as it indicated an appreciable ancient culture. Among the fine pottery wares recovered from this period mention may be made of small fragments of black-and-red ware, a class of pale red vases with beaded and bevelled rim and globular body. While these were unearthed along with plain sherds of thin section and sandy fabric and parts of thick hand-made pottery like those excavated ones of the previous year, a uniform deposit of yellowish and whitish sandy silt overlying this occupational *stratum*, a reminiscence of a flood from the Ajay also noticed in the last year has made the sequence slightly problemetic. Among the scanty remains of this layer dots of charcoal, a few microliths and a kind of chocolate ware with whitish painting are of special interest as these mainly occuring in dark patches seemingly belong to an age of transition from Period I to Period II which must have witnessed the river-flood.

The period II of Pandu Rajar Dhibi seems to have witnessed a very flourishing stage of civilisation as now we meet with systematically aligned floors of houses occasionally superimposed made of reddish pellety laterite (Plate XI) bearing signs of post-holes as also traces of a paved passage what appears to be a lane flanking two houses, an elaborate human cemetery, numerous examples of painted pottery, channel-spouted bowls, microliths including one with crested medial ridge and copper ornaments.

Regarding the excavated stone tools (Plates XLIV & XII, 5 & 7) from Pandu Rajar Dhibi it may be observed that although they may be classified as microliths in several cases their flaking style and non-geometric shapes have undeniable resemblance with the tools of Series II though fluted cores and a parallel sided blade have occurred in Period III. While tools from Period II include a beautifully finished point-cum-scraper and a flake with "crested medial ridge", their occurrence in Period II apart from a solitary example in Period I is obviously significant. It is even befitting to regard these examples from chalcolithic levels as a separate group being characteristic of the chalcolithic culture of the Ajay Valley where similar tools are occasionally found on surface along with proto-historic pottery both in Birbhum and Burdwan districts. A beautiful long blade with "crested guiding ridge" technique from *Bhutshahar* in the northern terrace of the Ajay and tools of microlithic and earlier affiliation from *Satkahonia* and *Bistupur* in the south of the river not far away from Pandu Rajar Dhibi may better be grouped in this general Ajay complex. Sometimes one has to consider whether they sometimes reflect in Bengal a hitherto unknown stage of transition from Series II to Series III ? A study of this industry will reveal the high antiquity of the civilisation of Pandu Rajar Dhibi which in future may be proved to be as enigmatic as the culture of pre-Dynastic Nubia in Egypt. The origin of such culture may reasonably go back to 3rd millennium

users of microliths, copper ornaments including spiral bangles of seemingly West Asiatic affinity besides painted and perforated wares. The copper objects (Plate XII, 3 & 4) from the chalcolithic levels mainly comprise of spiral bangles and rings as also eye-pencils and a fish-hook and these often reveal delicate workmanship. Amongst these a ring of twisted wire evidently made for a child or a slender young boy or a girl bears witness of a refined taste recalling similar ornaments of Cretan and Trojan civilisations. The human cemetery of Trench No. RDB-IC (Plates XLVIII A & XLVIII B) flanking the Trench No. RDB-IIE succeeded the earlier cemetery of Period I and here six skeletal remains were discovered, four lying extended from east to west and two in urns of plain fabric covered by lids of black-and-red ware one of which was found almost intact. A study of these skeletons bring to us several very important points which can be considered in the light of discovery of similar skeletons at other archaeological sites of India and outside. One of these is in slightly flexed condition with arms and legs joined together. The legs of this skeleton are further severed from ankles as it happened at the chalcolithic sites of *Chandoli* and *Nevasa* in Maharastra besides the alignment of skeletons remotely recalling the tradition of very early secondary burials like that of the Upper Palaeolithic triple burial at Barma Grande in Europe. While it appears from the drawing of Verneau that two of the skeletons at Barma Grande in France are without their ankles, Jacquetta Hawkes has commented "That the practice of interment after the flesh had decayed, another custom frequent among primitives and usually linked with the idea of a final setting free of the spirit to join its fellows, seems not to have been observed before Mesolithic times." (*Prehistory And The Beginning Of Civilisation,* Vol. I, UNESCO publication 1963, Page 209).

An almost intact skeleton of a supposedly long-headed primitive male or female was also seen as lying in the same east-west orientation i.e. the head pointing to the east though

turned to the south along with two afore-mentioned urn-burials, one very close to the feet and the other a few feet away from the head in an undeniably conscious alignment. The extended burial of the skeleton of an adult was noticed with a tubular copper bead and barrel-shaped bead of agate as still sticking to the jaw. Such meagre trinkets as to be seen a few thousands of years after burial recall various proto-historic human burials with beaded ornaments like those of chalcolithic Nevasa and Natufian Palestine among various other instances of the ancient world. Besides a milk-white shell bead unearthed from this level of RDB-IC, the two urn-burials show some difference as while the one of the west contained a few human bones and a broken lid, the other at the east contained long bones and the skull of an adult covered by an almost intact hemispherical lid of black-and-red ware.

Apart from these first evidences of proto-historic inhumation in eastern India, the painted red ware and black-and-red ware of Period II are of outstanding archaeological importance. The lustrous red ware is generally represented by bowls with or without straight extended rims and other vessels and the paintings on them are mostly done in black or whitish pigment of subdued tone (Plate XXXVIII). Besides the fine fabric of occasionally well-levigated clay which is typical of the Ajay Valley the painted patterns included among others solid triangles, wavy lines, simple bands sometimes joined by uprights, lattices, hatched lozenges and a leaf or wavy lines flanked by *sigmas* as if the formalised motif of a stream with a hovering flock of birds. Apart from the white painted chocolate ware bowls coming from layer (6) composed of compact whitish or yellowish sandy silt with scanty remains of material culture, a class of dishes with concave inner surface of black-burnished ware belonging to Period II are embellished with rows of strokes of translucent white as it is so typical with painted black-and-red ware unearthed from early levels. Among other pottery-types mention may be made of a class

of inverted helmet-shaped globular vases of black-and-red ware with abruptly extended rims after a fold at the neck which somehow resemble the essential forms of a class of pottery from Tell Halaf in Western Asia and a kind of silver vessels from Troy as belonging to 'The Treasures of Priam' though the analogy may only be superficial. Besides, there is another class of elegant conical basins of the same ware resembling flower-pots with a cluster of perforations at the bottom and signs of later drilling at the neck evidently meant for suspension for ritualistic or any other purposes. Very often paintings in translucent white occur on the inner glossy black surface of black-and-red wares like those found on similar excavated pottery unearthed by the trial digging of 1962 and these uniformly comprise of chevrons, dots, *sigmas*, hyphens, oblique strokes and other symbols recalling similar paintings on excavated black-and-red wares from *Gilund* and *Ahar* in Rajasthan. The channel-spouted bowls of black-and-red ware generally found in broken condition and bearing painted strokes in white have also profusely occurred in this level (Plate XXXVI) and they are comparable with the terracotta channel-spouted bowls of *Navda-Toli* and *Maheswar* in the basin of the Narmada and a unique find of copper from *Khurdi* in Rajasthan (besides those from *Tepe Giyan* in Iran, a lime-stone tray from *Catal Huyuk* in Asia Minor and the Early Minoan pottery with *beak, teapot spouts* or *bridge spouts* from Vasiliki in the island of Crete in the eastern Mediterranean world. While the channel-spouted tray from *Catal Hüyük* stratigraphically belongs to 7th-6th millennium B. C., the characteristic Minoan wares from *Vasiliki* are supposed to have been 'evidently modelled on similar copper and stone vases of the Egyptian Old Kingdom Period' by Donald A. Mackenzie (*Myths of Crete & Pre-Hellenic Europe*. The Gresham Publishing Company, London, page-209). The origin of the Cretan *schnabelkannen* (vase-form) has been attributed to "trading relations between the Cretans and the

Nilotic peoples" (*ibid*). As the splayed ends of the *teapot spouts* or *channel-spouts* appear to be similar (as studied from photograph) with those from Vasiliki are we to suppose a similar relation between Bengal and Egypt in a period when this part of India was not dominated by Vedic Aryans a few thousands of years ago? This may be answered by further diggings and explorations in the lateritic and hilly terrains of West Bengal and the neighbouring Chotanagpur plateau. It is true that the channel-spouts of *Pandu Rajar Dhibi* are more allied with Early Minoan types than with the Iranian or Central Indian forms which are straight instead of being splayed at the end.

The excavated pottery wares from Periods II and III include other examples which are also comparable with some of the pottery types of the Anatolian and other western complexes like a small bridge-spout of black ware, footed goblets or beakers of polished red ware, handled vases and a tray. A few of these recall among others some of the pottery types from the Middle Bronze Age of Alaca Hüyük and other comparable sites in the neighbourhood.

Apart from the various other excavated antiquities like beads of semi-precious stones including a leech-shaped one etched in white, bone arrow-heads and awls (Plates XV & XII, 6) as also mutilated examples of what appear to be bowls-on-stands (Plate XXV,) the Period II has become more remarkable for a number of floors of houses made of beaten peletty laterite or *moorum* bearing signs of post-holes. These floors of reddish complexion reveal a systematic layout and occasionally they are superimposed upon each other. At one place in Trench No. RDB : IIIB at the highest crest of the mound a beautiful yellowish lane or a pavement was seen as separating such two houses at a depth 13′9″ from surface. So the inhabitants of Period II lived in houses with walls of mud-plastered reeds which is amply evidenced by lumps of clay bearing reed impressions. Such a lump of mud-plastering bearing

reed-impressions was also unearthed from the level of Period I. In Trench No. RDB-IIA on the northern slope of the mound a heap of burnt clay tiles or plastering what appeared to be the debris of a fallen roof, was noticed in the level of Period II as lying on a floor of burnt earth immediately upon the uneven surface of whitish sandy silt of layer (6) probably deposited by flood waters in some unknown proto-historic phase. In Period II ascribed to 11th century B. C. by Radio-Carbon examination the occupation at Pandu Rajar Dhibi might be thick and the supply of water was obviously good which might have left its mark in the greenish tint of some of this sandy layers of this level. Among the skeletal remains of animals which are now being examined by the Anthropological Survey of India mention may be made of a partly fossilised small bone of supposedly a *Nilgai* unearthed from the cemetery level besides antlers recalling that of a *Sambar* deer unearthed in the year 1962. In this connection it may be mentioned that animal bones and antlers unearthed by the digging of 1962 were examined by the Anthropological Survey of India and they were found to be domesticated pig *(Sus Scrofa Cristatus Wagner)* and of humped bull *(Bos Indicus Lynn)*, besides the antlers of Sambar deer *(Cervus Unicolor kerr)*. The evidences of an industry of objects probably tools, fashioned out of antlers have been noticed in proto-historic levels and these include half-sawn or fully sawn-up specimens.

The material culture of Pandu Rajar Dhibi remained almost the same in Period III though the emergence of polished neolithic celts with pointed butts, as also the occurrence of a few war-implements of iron like points and blades had been noticed. Apart from the recovery of various examples of beautiful painted pottery and a vase-stand as those of the preceding age, the microliths included fluted cores occasionally associated with chalcolithic civilisation besides recalling similar ones from Sukkur and Rohri in Sind. This cultural phase which may be called as *chalcolithic-neolithic* in

the language of V. D. Krishnaswamy (*Ancient India*, No. 16, 1960) is well-represented by microliths, (Plate XLIV) copper objects comprising of bangles, rings, eye-pencils and a fish-hook besides neolithic celts (Plate XLVII), painted black-and-red ware and red ware (Plates XXXVIII XXXV).

The excavations conducted in the years 1962 and 1963 have already shown that there was an industry of bone tools in Periods II (Plate XV) and III whose sudden occurrence brings new light on the proto-historic civilisation of Pandu Rajar Dhibi. These bone tools recovered from Trench No. 4A on the summit of the main mound include a seemingly broken point which bears mysterious affinity with a class of the 4th millennium B.C. pre-Dynastic bone tools of Afyeh in Nubia in Egypt as made by Group A people. The bone tools of Pandu Rajar Dhibi mainly consist of points and awls. One of the awls with a hollow base recovered from the *stratum* of Period II is beautifully made. It is possible that this was used for writing or decoration or as a needle. These were recovered along with stone implements, copper objects and painted pottery belonging to the level of human cemetery. As it has been already mentioned there are also fine instances of working with antlers in Period II. While such bone tools are rare in Indian archaeology being reminiscent of high antiquity synchronising cultures of hunting communities, they are comparable with some of those of the Neolithic phase of Burzahom in Kashmir once supposed to have covered an age a few millennia before Christ. As a matter of fact, these along with microliths of stone and fossil wood as also spiral bangles of copper and beautiful examples of painted pottery may one day push back the chronology of this chalcolithic civilisation of Bengal even before 2nd millennium B.C. Here one has to consider that the bone tools of Pandu Rajar Dhibi were found in microlithic complex whereas those from Burzahom in Kashmir were unearthed from neolithic phase. Further, it may be pointed out that neoliths along with microliths were found in Period III

of Pandu Rajar Dhibi. Apart from floors and houses made of pellety laterite or *moorum* like those of preceding period, there are traces of a deeply penetrating sullage pit and an extensive layer of ashes bearing witness to a serious conflagration that might have destroyed the glamour of proto-historic civilisation of Pandu Rajar Dhibi. Regarding the plans of houses of Periods I and II it may be said that they appear to be round, square or oblong as observed by Sri P. K. Banerjee, Conservation Assistant of the Directorate of Archaeology, West Bengal by a study of post-holes and other details. The walls of the houses were evidently made of reed-screens plastered with mud, while the roofs sometimes might have rested on gables as it may be further vaguely suggested by a *graffiti* on pottery.

In one of the trenches at the peak of the artificial knoll such a floor with a post-hole and a debris of what appeared to be the roof of the house was found within this layer of ashes while the most spectacular was the finding of a white painted channel-spouted bowl of black-and-red ware which was seen as lying invertedly on this floor (Plate XVIII). This complete channel-spouted bowl with sagger base, graceful convex sides, slightly incurved rim with a groove and splayed edge of the spout is a magnificent example and offers a significant landmark in the growth and development of proto-historic civilisation of the Ajay Valley in Bengal. While the interior of this channel-spouted bowl is symbolically embellished with seven vertical rows of whitish strokes recalling the early concept of the *Vasudhara*, it may noticed that the channel-spouts of Period II are more slender than those of Period III when these appear to be broader and have more noticeable splayed edge like fish-tail.

That the area of the so-called citadel within the main mound was devastated by an extensive conflagration cannot be doubted and it is also to be considered whether the few iron tools of Period III bear evidence of influx of a new people if

not plainly an intrusion of culture. Is it possible, that, the conflagration of Period III was the result of an invasion preceded by trade of implements of iron ? Above the layer of ashes iron occurs frequently along with completely new types of pottery belonging to early historic and later times when houses of kiln-burnt bricks were made flanking rubble pavements. On the basis of such revolutionary change between the material cultures of Period III and Period IV with its sub-phases it is obvious to conclude that there was a break of culture (suggested by Sri B. B. Lal, Director, Delhi School of Archaeology) and desertion of the site after conflagration. The earlier antiquities which are sometimes found in post-conflagration level may be attributed to pits and it is difficult to ascertain whether they sometimes represent a kind of survival. In one of such pits of Period IV was found a round stone seal bearing in relief mysterious symbols and pictographs (Plate XVII). The round seal of black steatite is one of the most important findings in the year 1963 as it perhaps opens up a new horizon of possibilities in the culture of Pandu Rajar Dhibi belonging to the general complex of the Ajay Valley. The seal bears a row of engraved symbols like hieroglyphs in a compartment on the margin while three pictographs representing a wavy line, a fish (shark) and a globular object in relief occur below successively. Since the discovery of the seal from an ash-pit penetrating the strata of Periods II and III much attention was paid for its proper identification and study and it was surmised that it might have some relation with the ancient civilisation of the Near East. Sri Anil Kumar Karmakar of the Directorate who supervised the trench when it was unearthed also recorded a small flat-bottomed terracotta boat of red colour with centrally pierced applied eyes (Plate XL) which also came out along with this.

The identification of the seal did not present a baffling problem for long as very recently a young British archaeologist Mr. Michael Ridley undertook the task of its scientific

interpretation and at last satisfactorily explained it as of Minoan origin. By incessantly working on alphabetic grid system he has arrived at the conclusion, that, while the engraved hieroglyphs represent characters of *Linear A* script, the pictographs are comparable with those of the Phaestos Disc both obviously expressing the same proper name *Aetea.* In his published monograph *The seal Of Aetea And The Minoan Scripts* he has also claimed to have deciphered for the first time the *Linear A* scripts by depending on the seal from Pandu Rajar Dhibi which reveals as he rightly supposes Cretan hieroglyphs and pictographs together though he is aware of the resemblance between the pictographs and the *Rongo Rongo* scripts of the Easter Island of the distant Pacific. According to Michael Ridley, "The decipherment of the seal of Aetea has in itself already resulted in the falling into place of a great deal of evidence which points to the possibility that the inhabitants of Crete found their way to India 3500 years ago and traded with the people of Bengal," (*Ibid,* intro). The reading and interpretation by him is further supported by a number of *graffiti* occuring on pottery of black-and-red ware and black-burnished ware besides on a burnt lump of clay from Pandu Rajar Dhibi and analogous chalcolithic sites in the Ajay Valley from *Ganga Danga* near the confluence of the Ajay and the Bhagirathi at Katwa in the East to the site of *Mandira* in the neighbourhood of Jaydeb-Kenduli in the West. These symbols including equal-limbed cross within frame, double chevrons, upright cut by horizontal lines etc. again appear to be no other than hieroglyphs sometimes exactly comparable with Minoan scripts apart from their occasional similarity with proto-historic Indian *graffiti* on pottery. At least, the seal and engraving conclusively reveal that there was once a method of writing of sharp linear pattern in the Ajay Valley somewhere in the 2nd millennium B.C. Here attention may be drawn to fragments of black-burnished ware finely incised with a humped bull and a pea-hen pecking

a zig-zag line which may be a serpent or a river (Plate XXXI). Here again one has to consider whether they have a mythical or pictographic aspect particularly in the context of the latter's resemblance with certain characters of Egyptian hieroglyphs which may have some deeper significance. Among other excavated antiquities from this level various examples of stamped and incised pottery (Plates XXX & XIX) as also several terracotta animal figures and a few sprinklers may reveal that the site was largely re-occupied in pre-Mauryyan and historic times. Whereas a class of terracotta beak-headed mother-goddesses with pin-hole decorations and one having accentuated breasts (Plate XXI) from this level seem to have an early tradition, the lower part of a terracotta fertility goddess with splayed hips encircled by a symbolic girdle represented by pin-holes found in the layer of ashes upon a floor of Period III may reveal the artistic trends of proto-historic times. A careful study of all these relics originally revealed that the chalcolithic habitation at Pandu Rajar Dhibi which might have began in the latter half of the 2nd millennium B.C. continued to flourish inspite of recognisable changes down to the beginning of 1st millennium B. C. Recently, a Radio-Carbon analysis of an excavated charcoal sample from the Cemetery level of Period II of Pandu Rajar Dhibi as conducted by Dr. Shyamadas Chatterjee, Head of the Department of Physics, Jadavpur University, Calcutta has confirmed the expectation by dating the chalcolithic phase to B.C. 1012 ± 120. It is obvious that Period I belonged to earlier times. Here Period IV may again be divided into two phases. *Phase 'A'* represents a layer of pre-Mauryyan and early historic times after bearing prominent signs of instrusion of much later periods as revealed by a scattered distribution of a class of red ware, plain vases and conical cups among others which may be conveniently put under *Phase 'B'*. Among the important findings of *Phase 'A'* of Period IV may be mentioned a fragment of a vase of black ware incised with

a row of fish on frieze above a hatched band (Plate XXX) vaguely comparable with motifs of Post-Harappan incised pottery of Bara and Salaura in East Punjab and a retouched neolithic celt (Plate XLVII, 2) evidently showing signs of long use. Besides, there are sherds enigmatically stamped with shields crossed with arrows (Plate XIX) recalling the ancient Egyptian symbol of goddess Neith.

The excavations at Pandu Rajar Dhibi have revealed the existence of a Copper Age civilisation in eastern India which had once a close relation with chalcolithic civilisation of Central India and Rajasthan as illuminated by a comparison of cultural assemblages of these regions. While the eminent experts of the *Tata Institute of Fundamental Research* in Bombay have opined that the culture of Pandu Rajar Dhibi developed as a diffusion from Central India wherefrom the culture also diffused to western India there are various points yet unsolved. This eastern Indian chalcolithic civilisation which was mainly confined to the basin of the Ajay in west Bengal so far revealed by systematic explorations undertaken by the Directorate of Archaeology of the State may suggest a proto-historic route connecting the ancient Chotanagpur plateau and the flood-plains of the Bhagirathi near Katwa where the Ajay mingles up with the river. The civilisation which had maritime contacts with remote sea-shores might have stranger legends of the past without being simply the product of diffusion through over-land routes.

The conclusions as arrived at during the excavation of 1963 was further corroborated by the digging of 1964 which revealed a conscious alignment of floors of beaten pellety laterite occasionally flanked by lanes in the level of Period 11. In this year trenches were laid down over a large area on the northern shoulder of the main mound (Plate V) and long trenches were dug to assess the sequence of the central apex of Pandu Rajar Dhibi. In trench No. 6E flanking the Cemetery area of the excavation of 1963 a floor with double curves

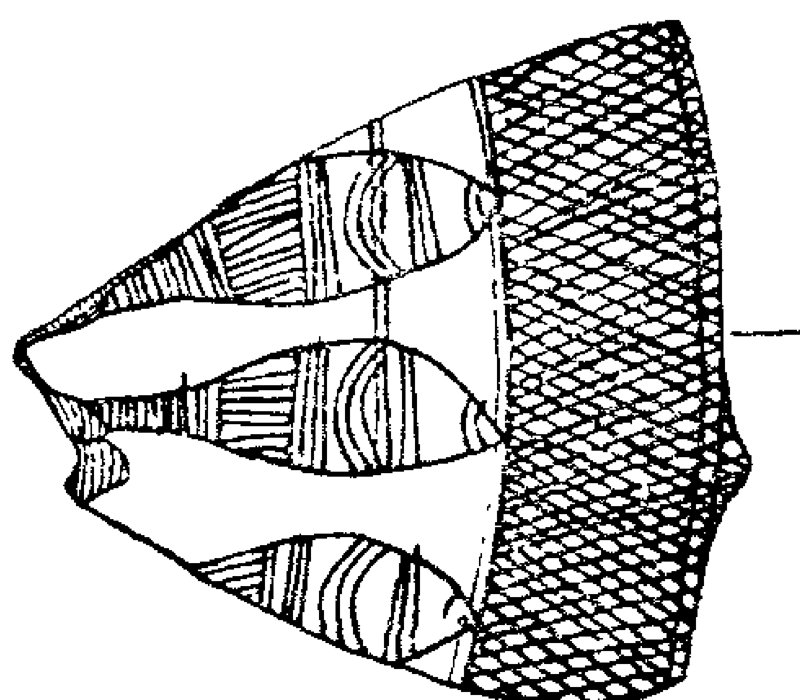
(Plate VIII) and a small bench or altar was found in the level of Period II which appeared to be very enigmatic. As it happened in the last year this years' digging also brought to light several highly interesting bone tools including hollow points or awls and a unique arrow-head with a tang (Plate XVI). In fact, the cultural equipments of the material culture of Period II remained the same as they were found during the excavation of 1963. The repertoire of sherds of painted lustrous red ware (Plate XLII, XXII & XXXVIII) revealed the same geometric patterns in a very confident and practised style and an example appeared to be significant for the occurrence of a radiating star symbol or a formalised star-fish. Apart from the painted black-and-red ware, incised pottery and rusticated vases, a broken bowl with a long channel-spout was found on a floor of this level in Trench No. 6A. Besides, a beak-shaped bridge-spout of a thin black ware was found from a layer of Period II at a depth of 2.95m. in Trench no. RDB 6G in this year. This may be compared with a similar one found from the level of Period II in 1963. The rich assemblage of lustrous red ware and black-and-red ware lend a special significance to the occupation of Period II. It is interesting to recall that among important microliths (Plate XLIII) found from this level one was discovered as sticking to the surface of a lane flanking the afore-mentioned floor of Trench 6A. While beautiful copper objects including sprial rings and bangles were unearthed from the *stratum* of Period II, other enigmatic findings attach a surpassing importance to Period III of Pandu Rajar Dhibi. During the excavation of 1964 it was decisively proved that iron was known and probably smelted at this site side by side with the use of copper and microliths in Period III in a chronological horizon around 1000 B. C. The Trench no. 7A dug on the central peak of the sprawling mound yielded several findings of great significance and they include two heads of hollow terracotta (Plates XXVI & XXVIII) and a short iron sword of 'cut-and-thrust' type with

tapering point and sturdy hilt (late XIV). The terracotta heads reveal some traits of style and treatment unusual in Indian art as their long nose starting down from the forehead, large applied eyes and the strong protuberant chin portray a gaunt personality and separately recall some of the conventional traits of the art of the Aegaean world and its neighbourhood including some of the Hittite, Philistine and Phrygian sculptures. While one of these has a peculiar hair-do shown by slanting scratches, the another wears a conical helmet with diminishing circles not unlike a kind of Hittite head-gears. In fact, the terracotta heads from Pandu Rajar Dhibi are partly comparable with a class of excavated long-nosed terracotta heads from Tell-el-Ashdod in Palestine (*The Illustrated London News*, November, 1963, p. 906, fig. 13).

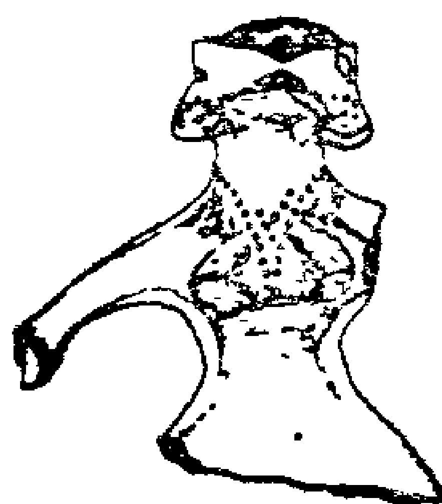
The iron sword from Trench no. 7A is also a very interesting object as it again not only reveals like other fragmentary blades and a spear-head the true position of iron in the civilisation of the Ajay Valley, but it also appears to be a counterpart of bronze swords of Palestine and neighbouring areas. Besides, comparing its shape with that of an excavated bronze sword from Gibeon in Palestine, the home of the Gibeonites, this sword recalls a similar one as depicted on a beautiful *rhyton* from Mycenaean kition in Cyprus (*The Illustrated London News*, Dec. 22, 1962, p. 1013, fig. 5). While the iron sword was associated with proto-historic pottery-fragments including a vase of pinkish buff colour and flat base, a class of clay seals from the same level bear the uncommon motif of a double-axe with a dotted border at one end. These seals reveal cord-marks and it is likely they were once used for the same purpose of denoting a blazon or a monogram as on a kind of clay Minoan seals. In this connection, it may be noted that the reportoire of excavated antiquities of 1964 include a small terracotta double-axe with cord-impressions evidently made for ritualistic purpose. This occurrence of a votive double-axe at Pandu Rajar Dhibi is highly interesting as it not only recalls the proto-

historic Cretan double-axe (*Labrys*), but also a class of votive double-axes from Malta. The cult of the double-axe being associated with the Minoan civilisation once spread over various regions of Europe and the Mediterranean world. Even a Maltese legend once referred to a legendary land of the double-axe, the *Bufies* far away to the south of Sahara. Apart from the lower part of a terracotta mother-goddess (Plate XXIII) with splayed hips, the terracotta heads and clay seals from Trench No. 7A, unearthed from the level of the iron sword, a terracotta stamp seal from general level of Period II bears a star-motif comparable with a western Asiatic character in style and pattern. Besides, an enigmatic bronze fish with sharp fins and a loop found in mud caused by rainfall and hence unrecorded, among other important findings from the proto-historic mound mention may be made of a scraper-cum-blade of red carnelian and a round token of gold from the stratum of Period III. The gold piece seems to be hammered on the edge and bears minute parallel scratches. It weighs about 14 grains troy roughly one fourth being missing. If the full coin weighed about 21 grains, then are we to regard it as a coin somewhat like those mentioned in ancient Indian literature (D. R. Bhandarkar : *Lectures on Indian Numismatics*, The Char-michael Lectures, 1921, chapters II & III). It is also possible that the incised strokes actually signify a denomination like those on the proto-historic cattle-inventories of Crete. If this is actually a coin the discovery will be regarded as very important as this will strengthen various literary evidences regarding the circulation of gold tokens and coins in Vedic and Post-Vedic India. The above-mentioned bronze fish with about 95.5 per cent of copper and a three-pronged tail has been identified with prehistoric *Coelacanth* especially its species *Latemeria* by Dr. B. Biswas, Superintending Zoologist, Zoological Survey of India. Recently, a few *Coelacanth* or *Latemeria* were found to have survived in the Sea off the east coast of Africa. The importance of this bronze fish is really

surpassing. During the excavation at Pandu Rajar Dhibi in 1964 some brick foundations and rolled bricks were again noticed in the upper-most level where a few polished neolithic celts were again found. It is possible that some continuation of the proto-historic civilisation can be traced in Period IV though it appears to have been lost in the debris and accumulation of much later times beyond centuries.



Explorations in the Ajay Valley



Regular explorations in the basins of the Ajay, Kunoor and the Kopai as conducted by the Directorate of Archaeology of West Bengal have revealed the existence of about a dozen more proto-historic mounds besides Pandu Rajar Dhibi though the evidences of material culture discovered on surface are the same. These mounds and ruins prove the emergence and development of a civilisation in chalcolithic times mainly covering a closely-knit area at the frontiers of Burdwan and Birbhum districts. The archaeological relics will show that there was a story behind the rise of such a civilisation in 2nd millennium B. C. which seems to have extended to the eastern banks of the Bhagirathi near Diamond Harbour.

When the excavation was going on at Pandu Rajar Dhibi in 1962, a considerably large mound was discovered at *Basantapur* (Lat. 23°32′30″ & Long. 87°41′30″) overlooking the banks of the Kunoor about six miles to the south of the site. The antiquities (Plate XLV, 1—6) collected from the mound include examples of painted black-and-red ware, lustrous red ware, incised pottery, microliths, a lump of copper and fragments of channel-spouted bowls. While there is a rare example of lustrous red ware painted in black with parallel bands, solid triangles and slanting ladder-like designs schematically superimposed the painted designs on other fragments of

the same were mainly representing bowls consist of solid triangles, bands and various geometric patterns. Besides, there is a sherd of chocolate-red ware bowl with extended rim which is painted with oblique parallel lines enclosing dots in creamish white comparable with some painted gray ware. Apart from this, the other painted decoration on lustrous red ware from Basantapur reveal a pleasing style which might have a long tradition behind.

During various explorations a low and circular mound also yielding the same sort of proto-historic pottery was noticed near Bhedia about eight miles to the south of Pandu Rajar Dhibi. The mound which is known as *Rajar Danga* (Lat. 23°34′30″ & Long. 87°42′30″) stands in the basin of the Ajay and the Kunoor. Besides a few microlithic flakes, the pottery fragments recovered from the eroded surface of *Rajar Danga* mainly represent black-and-red ware, lustrous red ware and chocolate coloured vases like those from the chalcolithic levels of Pandu Rajar Dhibi. A Similar proto-historic mound known as *Dhantikrar Dhib* (Lat. 23° 30′ & Long. 87° 42′) was also discovered in the neighbourhood close to Gushkara.

In the last spring an excavation was undertaken on the mound of Goswamikhanda, otherwise known as *Barasater Danga* lying in a terrace (Lat. 23° 34′30″ & Long. 87° 37′30″) overlooking the river Ajay close to Kaksa forest in Burdwan district. The main objective of this digging was to uncover a structure of laterite blocks which was partially revealed in the north by the digging of Damodar Valley Corporation Canal several years ago.

The excavation at Goswamikhanda conducted by the writer being assisted by the Superintendents and the Staff laid bare a massive and very extensive structure of laterite blocks which was evidently built, repaired or destroyed in different periods (Plate IX & X). On stratigraphic and other grounds it appeared possible that a huge platform or

dais (length : 8′40 m, breadth : 6′25 m, height : 3′40 m) was first built by men living on a surface of yellowish sandy silt often studded with laterite pellets. Apart from the discovery of a number of microliths and a class of small sherds of pale red ware from this level the platform went down to a depth of 3.40m. resting on a hard bed of cemented laterite nodules. This lowest *stratum* yielded a piece of fossil wood what appeared to be a crude scraper. Immediately above the layer of yellowish sandy silt an extensive floor of beaten pellety laterite with signs of large post-holes was uncovered and it seems to have synchronised the flanking constructions of the main platform or pavilion. Both the flanking constructions were found to have been resting on a layer of *Kankar* nodules. At this age were perhaps added a smaller platform in the east and a group of four square pillars with slightly tapering base between the original platform and this. The three of the pillars retain a height of 2.25 metres, their upper-most dimension being 1.50 metres × 1.50 metres. The space between the pillars is about 1 metre. In this period of second construction at Goswamikhanda may be assigned sherds of a class of terracotta conical cups and a brick moulded with opposite stepped merlons (Plate XXIX) recalling some traits of early miniature shrines of western Asia. In the last phase of Goswamikhanda another floor of dark gray laterite nodules superimposed the earlier floor and the uppermost construction showed here and there iron dowels beneath a debris of laterite rubbles mixed up with fragments of Brahmanical iconographic images including a mutilated Karttikeya as *sikhivahana* and Suryya stylistically assignable to about 10th century A. D. The entire structure extends for 21.15 metres and its maximum breadth so far uncovered is measured as 11.40 metres. Among the pottery from this last phase may be mentioned terracotta conical cups, vases with out-curved and under-cut rims and grooves at the neck, and lids with inner grooves. In this connection, it may be mentioned that the relief of a mutilated

helmeted human head of Jasper found in the debris of the upper level appears to be highly enigmatic. The face with a long and slightly curved nose obviously appertains to proto-historic times like comparable sculptures of western Asia.

There appears to be a break after the first phase of the main platform. While the second phase of construction appears to belong (the Jasper head and the moulded brick suggest) to a very early period, the main square platform in the west probably appertains to an age in proto-historic times though it is difficult to associate it with an industry of microliths.

The convention of making a platform is further revealed in a trench in a mango grove to the south of the main mound where a brick platform or bench (3.85 m. × 2.76 m. × 1.66 m) flanked by a recessed wall was uncovered (Plate VII). Here also the foundation trench commences from the layer of yellowish sandy silt.

By following the course of the Ajay and the Kunoor a very important proto-historic site yielding relics of the same culture was discovered at Mangalkot (Lat. 23° 32′ & Long. 87° 54′) just at the confluence of the two rivers. Though the site abounds with extensive mounds covering ruins of early historic and mediaeval times, there is a large undulated area where chalcolithic pottery wares (Plate XXXIII, 7 & 8) have been recently unearthed by tank-digging from a considerable depth. A study of the sections of two excavated tanks has revealed three phases. On the upper-most layer was seen early foundations of large and small burnt bricks. Immediately below this level were noticed pottery and terracotta figurines of Sunga-Kushan style. To this epoch may be attributed an uninscribed copper cast coin collected from the area. Below this layer may be found the proto-historic *stratum* of habitation. Obviously, there was a long break after this remote period of Copper Age which once distinguished the ancient civilisation of the Ajay Valley in the 2nd millennium B. C.

The cultural equipments of the chalcolithic phase at Mangalkot mainly consist of the same pottery types as those of Periods II and III of Pandu Rajar Dhibi. Apart from a good number of sherds of painted black-and-red ware and several fragmentary channel-spouted bowls of the same ware and black-burnished pottery, examples of lustrous red ware painted in black were also found. Besides, a single fragment of the rim portion of a vessel of thick and sturdy red ware painted with an oblique stroke was recovered. The proto-historic pottery wares only appeared on the mounds and slopes at the confluence of the Ajay and the Kunoor and, thereby, suggested of an important habitation which mainly depended on river-communication. Hence the question of a maritime trade will arise very reasonably to solve the problem of the occurrence of channel spouted bowls which are essentially comparable with similar bowls and vessels of western Asia, Anatolia and the Aegaean world.

In order to ascertain the extension of the Ajay civilisation explorations were undertaken in the east towards Katwa where the river, once navigable, merges into the Bhagirathi. Resultant of this investigation a proto-historic mound known as *Ganga-Danga* (Lat. 23° 42′ & Long. 88° 03′) was again discovered a few miles to the west of Katwa. Unlike the topography of Katwa where thick silts have accumulated, the low mound of *Ganga-Danga* looks eroded and stands by the side of an almost dried-up *Kandor* or stream which could have once linked up the area with the Bhagirathi. Among the antiquities recovered from *Ganga-Danga* mention may be made of fragments of black-and-red ware, lustrous red ware, black-burnished pottery and microliths. A few of the sherds of black-and-red ware, mainly knife-edged bowls, were found as painted in whitish pigment so typical of the culture of this time.

In order to ascertain the further extension of this culture regular explorations were also carried out on the northern

banks of the Ajay and its greater flood-plains fringing up the river Kopai in Birbhum district. Such field-works have effected discovery of a number of similar proto-historic mounds between Dubrajpur in the west and Kirnahar in the east all of which conceal the vestiges of a Copper Age civilisation so characteristic of the Ajay valley. These mounds may lie closer to the Kopai but the material culture remains unchanged. Therefore, it is reasonable to hold that all such discovered or un-discovered mounds conceal relics of the same culture the true chronological horizon of which may cover the 2nd millennium B.C. and even earlier times as the study of bone points and the industry of pre-geometric tools in the early levels of Pandu Rajar Dhibi may suggest. The Radio-Carbon examination of an excavated charcoal sample from the afore-mentioned site has already shown that the flourishing stage of such culture can be dated in the latter half of the second millennium B.C.

The mound of *Kirnahar* (Lat. 23°45′ & Long. 87°53′) is about 30′ feet high from the surrounding low lands and an examination of the *tumuli* showed that here brick structures were built presumably in historic times on the debris of a protohistoric civilisation whose cultural equipments included microliths and black-and-red ware. A fragment of channel-spouted bowl was also discovered from the slope of the mound.

The microliths from Kirnahar mound represent an industry and they include a retouched point and a small fluted core.

In the context of such discovery the mound of *Chandidas-Nanoor* in the vicinity shuld be mentioned as a beautifully retouched microlithic point and sherds of black-and-red ware occasionally painted and other significant pottery types including a fragment of channel-spouted bowl were also collected from this area. Fragments of numerous black-and-red ware bowls and vases were unearthed from this mound of Nanoor in 1945 when it was dug under the leadership of prof. K. G.

Goswami on behalf of the Calcutta University. Of course, the proto-historic importance of the site remained long unknown until the discovery of Pandu Rajar Dhibi.

Among other mounds may be mentioned those of Beluti, Supur, Mandira, Jashpur and Potanda all of which have yielded the same pottery types and occasionally microlithic flakes representing the culture of the Ajay Valley in apropos its relation with those of Central India, Rajasthan and Maharastra. Further, the site of *Potanda* (Lat. 24°53′ & Long. 87°35′) near Indragacha in the basin of the rivers Bakreswar and the Mayuraksi in Birbhum district has yielded four polished neolithic bar-celts. The neighbouring proto-historic mounds of *Salkhana* (Haraipur) flanking the road from Suri to Ahmedpur and recently explored by the Archaeological Survey of India were also visited by the Directorate of Archaeology, West Bengal effecting again recovery of chalcolithic pottery.

The mound of *Beluti* at *Saraswati-Tala* (Lat. 23°42′ & Long. 87°49′) near Kopai on the road between Bolpur and Kirnahar looks like a truncated pyramid or a western Asiatic *Tell* in miniature. Being about 15′ feet high it runs from east to west like all other mounds of the Ajay valley while it reveals the foundation of a brick-built shrine for about eight feet from the surface downwards below which there should be deposits of proto-historic times. A few small sherds recovered from this mound include examples of black-and-red and lustrous red wares besides a small mineralised bone, a piece of fossil wood and a microlithic waste flake. It was heard from the locality that during digging of the foundation of a building at the toe of the mound in recent years skeletal remains were unearthed along with a copper object from about 14′ feet below. Such accounts though may not be taken very seriously is worth noting in view of the presence of chalcolithic pottery.

Not far away from *Beluti* stands the proto-historic mound

of *Surath Rajar Dhibi* (Lat. 23°38′ & Long. 87°40′30″) at Supur on the left side of the road from Bolpur to Ilambazar. The sprawling mound is about 12′ feet high from the ground level and it again runs from east to west being perched with an old Siva temple standing amidst a few stone carvings of the Pala period. The findings from the eroded base of *Surath Rajar Dhibi* include small fragments of a mutilated lustrous red and chocolate-brown wares as also a small carnelian bead and a retouched microlith. While those findings recall the same insistence of occupying the Ajay basin and the valleys of its parallel streams like the Kunoor or the Kopai by men of the Copper Age, the Puranic tradition of King Surath as associated with the mound may also be recalled for appreciation of the high antiquity of the local culture. In this connection it may be mentioned that the Archaeological Survey of India have recently discovered a similar but much larger proto-historic mound at *Mahishadal* (Lat. 23°49′ & 87°42′) on the bank of the river Kopai near Bolpur where fragments of black-and-red ware and other chalcolithic potteries can still be found as scattered on eroded surface. Here the Eastern Circle of the Archaeological Survey of India has recently carried out a digging in this year under the direct guidance of Sri R. P. Das, its Assistant Superintendent.

The proto-historic mounds at *Mandira* (Lat. 23°45′ & Long. 87°27′) on the sandy banks of the Ajay near *Jaydeb-Kenduli* are highly important for judging the traits of the civilisation. The antiquities recovered from the area bear evidence of an industry of microliths apart from revealing the use of painted black-and-red and lustrous red wares, channel-spouted bowls as also preferated pottery. The black-and-red wares have been mostly represented by carinated and hemispherical bowls often with flanged rims. The topographic situation of *Mandira* on the banks of the Ajay and the profuse proto-historic pottery may suggest its importance as a port in the 2nd millennium B. C. like the chal-

colithic level of *Mangalkot* and other analogous sites in Burdwan and Birbhum districts.

The site of *Jashpur* (Lat. 23° 47′ & Long. 87° 25′) near Hetampur is again a very interesting site not only for its proximity to the microlithic industry site in the forest of *Giri Dangal*, but also for the mud rampart walls of the area which is popularly known as a 'queen's fort' in the context of various warfares in the past centuries. While it is difficult to ascertain the age of the defence-work, the common types of chalcolithic pottery as mentioned before including examples of channel-spouted bowls and microliths found on the surface at the southern entrance flanked by a natural ramp of laterite will bear evidence of a buried *stratum* of habitation perhaps appertaining to the 2nd millennium B.C. i.e., in the chronological horizon of the excavated materials from Pandu Rajar Dhibi. A few rolled ochre-coloured sherds from *Jashpur* may also have some further significance in relation with the proto-history of northern India. A few pieces of black-and-red ware and black-burnished ware discovered within the defence-work will further suggest that the fort itself occupies the place of a proto-historic habitation. Is it possible that the present ramparts forming a square had been elaborated in the past on the debris of a chalcolithic defence-work once guarding the Kopai route ?

A study of all these mounds and relics will reveal that this civilisation concerned was maritime in nature and it had relation with foreign lands across the sea. One of the distinguishing factors of this civilisation was the use of channel-spouted bowls whose cut spouts with splayed ends more conformed with those of the Minoan Crete than with the Iranian or Central Indian forms. In this connection may be mentioned among other excavated antiquities from Pandu Rajar Dhibi the steatite seal with hieroglyphs and engraved scripts on pottery sometimes identifiable as Minoan and certain pottery wares with a cluster of perforations at the

flat base resembling elegant flower vases. One has to wonder whether the latter were intended for keeping foreign flower plants, while it is not unknown that the ancient Greeks loved to bring their own favourite creepers to distant lands. Here it may be recalled that when Alexander invaded India the citizens of Nysaoi described themselves to him as descendants of Greeks who came to this country with the train of Dionysus and showed to him as proof of their story the ivy as originally brought from their homeland, So the idea of a pre-Macedonian relation between the Aegaean world and India is not unwarranted though here we shall have to keep in view the obvious possibility of such contacts through the sea-route. In this connection, it may be mentioned, that, recently tools of Series II and microlithic complex mainly of chert have been discovered along with a beaked jug or vase and a short channel-spouted or lipped bowl from Deulpota on the banks of the Ganga about six miles north of Diamond Harbour in 24 Parganas by exploration conducted by the Directorate of Archaeology of West Bengal. A good number of copper objects recovered from the area and brought to our notice later on by a local gentleman named Sri Damodar Haldar assisted by Sri Robin Haldar include a miniature ship with a symbolic orb, a broken chisel and fine scaraboid amulets of copper or bronze. There is a set of such amulets with the figures of larvae of beetle. The scaraboids are undoubted evidences of ancient contacts with Egypt probably during the days of the Middle Kingdom. The repertoire of pottery fragments picked up from the eroded river-side also include a high-necked vase with applied pellets and some other examples of seemingly chalcolithic origin. Besides, there are curious pottery bowls with elongated spouts at the base vaguely resembling a kind of olive-oil separators of Minoan civilisation. (R. W. Hutchinson : *Prehistoric Crete*, A Penguin Book, fig. 45, p. 242). The surprising collection of stone tools from Deulpota mainly consist of arrow-heads, borers, tranchets and scrapers. Further, an antler from the site bears

marks of sawing or cutting like some of those unearthed from the early levels of Pandu Rajar Dhibi. Formerly, a seemingly proto-historic terracotta sealing was recovered from the neighbouring site of Harinarayanpur also lying on the banks of the Ganga along with other archaic terracottas and a neolithic celt by the Asutosh Museum of Calcutta University. A group of polished neolithic celts and a hammer-stone were again discovered at Harinarayanpur by Sri Kalidas Dutta of Jaynagar-Majilpur. Now, it has also been learnt on the basis of excavations at Pandu Rajar Dhibi and explorations at other chalcolithic sites in Bengal and outside that formerly Tamlukon the Banks of the river Rupnarayanpur, the site of the ancient port of Tamralipta, also yielded proto-historic black-and-red ware and other pottery wares during excavation in 1955 carried out by the Archaeological Survey of India. These afford a link between the Copper age cultures in the valleys of the Rupnarayan and the Bhagirathi besides their obvious relation with the civilisation of the Ajay Valley.

The proto-historic mounds and sites as noted above no doubt reveal the remote antiquity of the Copper Age civilisation of the Ajay Valley and regions beyond its periphery and the proto-historic relics so far recovered and the sequence of Pandu Rajar Dhibi as much understood will not only speak of a highly developed and organised state or society whose economy, as it appears, was based on trade with lands beyond the Sea besides cultivation of rice, manufacture of pottery, rearing of cattles and pigs, and hunting. Here it may be recalled that Valerius Flaccus in his epic poem the *Argonautica* describes the *martial Gangaridae* as joining the Scythians to fight against the Colchians and the party of Jason on the shore of the Black Sea. (J. H. Mozley : *Valerius Flaccus*, The Loeb Classical Series, pp, 304-05). The annals of legendary Kings, their exploits, and the stories of buried treasures and perished citadels in the area as current among the *Adivasis* may vaguely recall the glory of that forgotten age.

Palaeoliths From Bon-Kati



The earliest cultural phase in the Ajay Valley is represented by a number of palaeoliths from Bonkati (Plate XLV) almost facing the banks of the river about 12 miles away from *Pandu Rajar Dhibi.* While the topography of the area is composed of detrital laterite and gravels, the eroded sections showed implements of the old Stone Age which appeared to have been succeeded by non-geometric crude microliths.

The following is the description of the palaeoliths from Bonkati as discovered by explorations conducted by the writer and Superintendent Dr. S. C. Mukherji :

1. Hand-axe of fossil-wood with sub-angular rounded butt and sides carefully tapered into a pointed working end. Though the main splitting and flaking were done on the dorsal surface the edge was retouched even by flaking on the ventral side.*

2. Hand-axe of quartzite having rounded pebble-butt with dots of ochre-coloured *Kankar* sticking on it. This is beak-shaped like the previous one. While the ventral has highly convex and sloping natural middle-ridge of the cortex, the dorsal and the margins are flaked for bringing out the working point at an acute angle.

* This highly interesting tool was discovered by Sri N. K. Bhowmick of this Directorate.

3. Chopper of fossil wood resembling the back of a dolphin. Horizontally seen it will show grooved flake-scars on the sloping hump. This appears to be comparable with similar leech-shaped tools of the Sohan complex. There is an encrustation of laterite on its flat upper surface. The tool is partly broken.

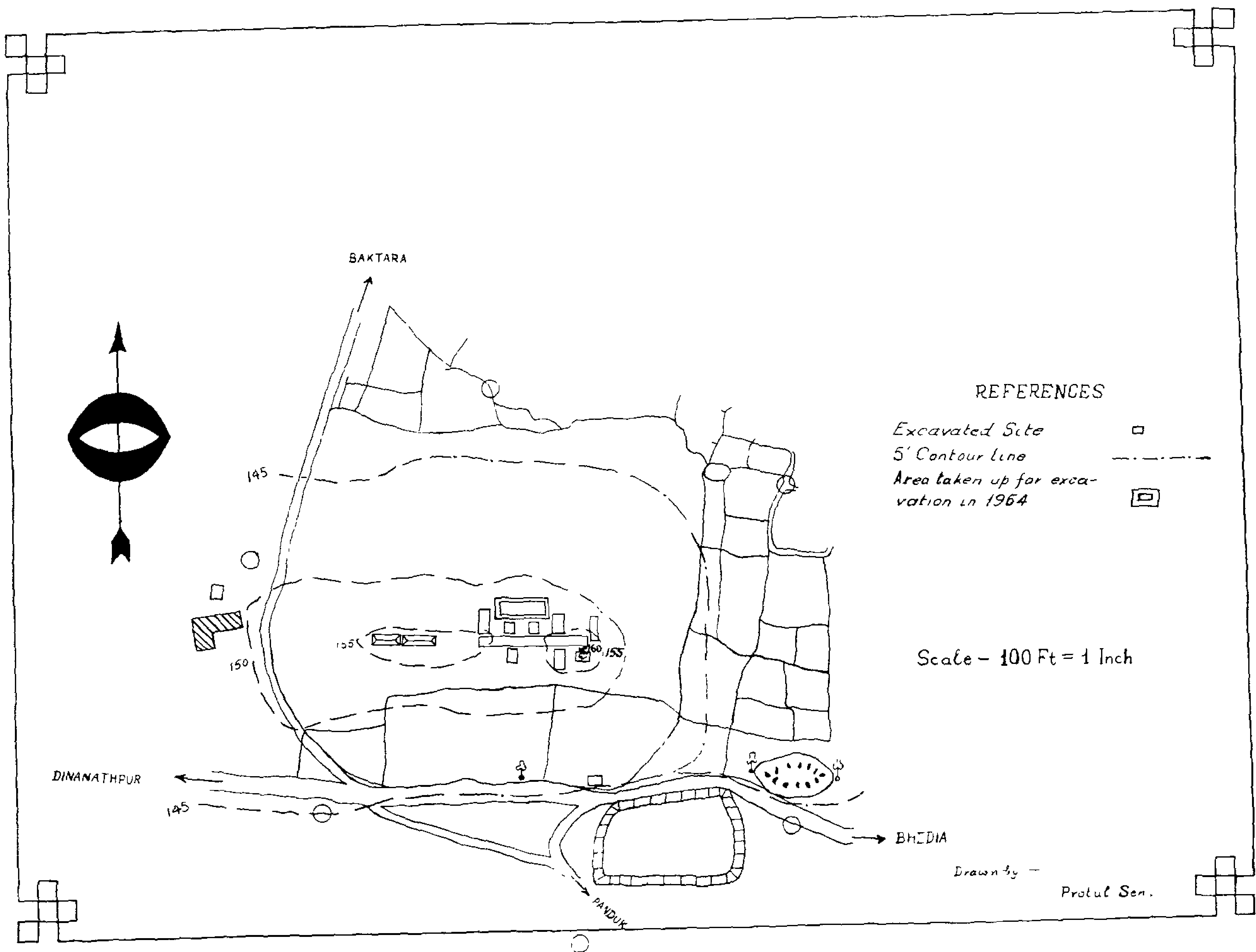
4. Unifacial pebble-tool or chopper of quartzite with fan-shaped cutting edge with steep flake scars. Though patinated this shows retouching. This may be compared with similar pebble-tools of 'Sohan complex' as discovered for the first time in this part of Bengal on the cliff of Rangamatia facing the Suvarnarekha river and in the ravine of the stream named Pitanau in Midnapur district by the Directorate of Archaeology of West Bengal. These pebble-tools from Midnapur were discovered by the writer and Sri D. K. Chakravarty, Superintendent.

5. Hand-axe of fossil-wood with sub-angular rounded butt and margins fractured into working end. Ochre-coloured *Kankars* are cemented with the tool. Similar to No. 1, but smaller.

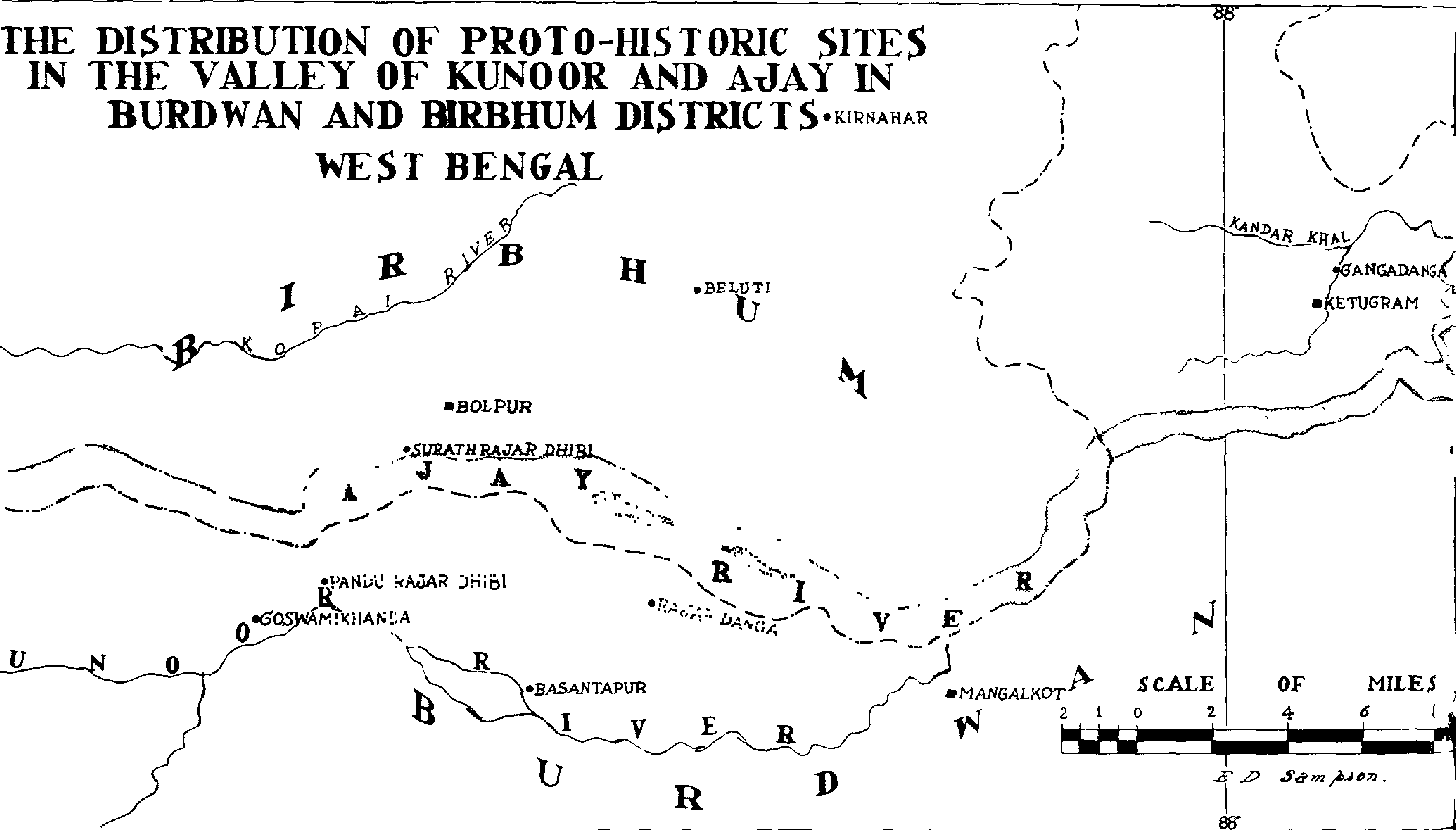
6. Small cleaver of fossil wood. Signs of retouching may be noticed.

While there are ample evidences that there was once an industry of fossil wood at Bon-Kati recalling the comparable horizon of *Anyathian* industry of Burma (as suggested by Sri V. D. Krishnaswamy), the pebble tools and the hand-axes from West Bengal may indicate routes of pre-historic migrations between western India and eastern Asia thousands of years ago. Here it may be noted that the existence of such an intermediary site in eastern India was formerly anticipated by scholars and correlations have already been done between the chopper tools of the *Sohan* industry and other similar industries of Burma, Malay and Java known as the Anyathian the, Tampanian and the Pajitanian respectively besides their known resemblance with the tools of the *Pithecanthropus* at Choukou-

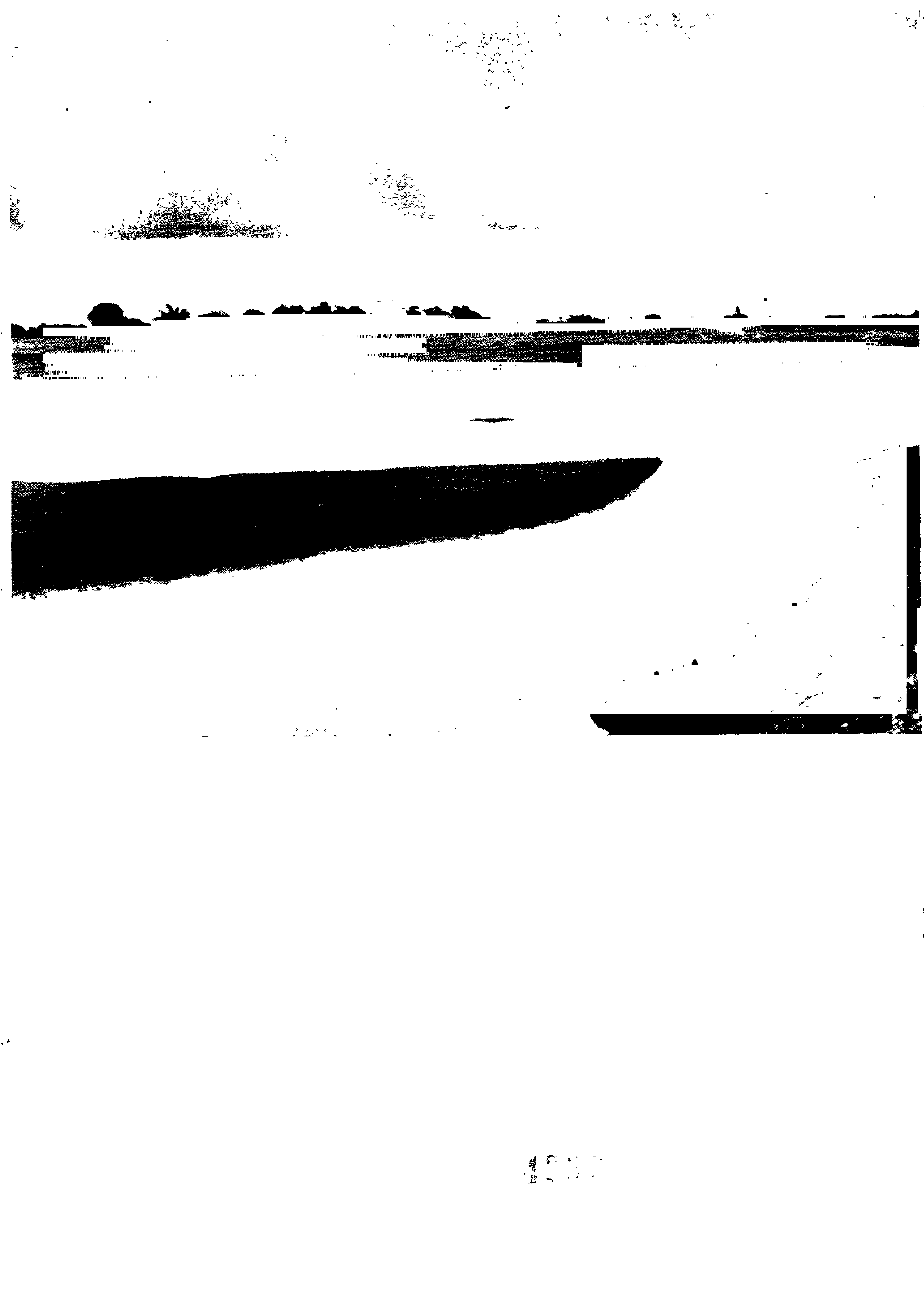
tien in China. As Stuart Piggott opined, "But at least we can say that the Soan industry is East Asiatic in affinities. Intervening sites between northern India and Burma should appear if field-work is undertaken" (*Prehistoric India*, A Pelican Book, Great Britain 1961, p. 31). The palaeoliths from the valleys of the Ajay and the Suvarnarekha may fittingly reveal the link. Here it may be recalled, that the Early *Soan* or *Sohan* tools are generally recognised as of "Early Middle Pleistocene date, within the Second Interglacial period and, dated by the solar radiation method, between about 400,000 and 200,000 years ago" (Stuart Piggott : *Ibid*). The developed hand-axes and other forms are evidently of later dates surviving over an enormous length of time. The long tradition of preparing tools in fossil wood in the basin of the Ajay and in the neighbouring areas was not lost in much later times. Scrapers and points of this material were found in chalcolithic levels of Pandu Rajar Dhibi apart from their discovery on surface. These tools of fossil wood, as also the pre-geometric microliths of fine-grained stones from Pandu Rajar Dhibi may again be compared with similar excavated tools from Birbhanpur on the Damodar river where post-holes were noticed suggesting an age of occupation. These comparisons become more interesting when a group of Upper Palaeolithic stone tools from Deulpota on the banks of the Bhagirathi near Diamond Harbour recall among others similar ones from Tjabenge in South Celebes. Such materials will no doubt enable us to probe into the unknown pre-history of the Far-East when the Lower Gangetic valley might have relation with the Eastern Archipelago effecting unbelievable diffusions of culture and civilisation.


BAKTARA
REFERENCES
Excavated Site
5' Contour line
Area taken up for excavation in 1964
Scale – 100 Ft = 1 Inch
145
150
155
160
155
DINANATHPUR
145
BHEDIA
PANDUK
Drawn by –
Protul Sen.

I

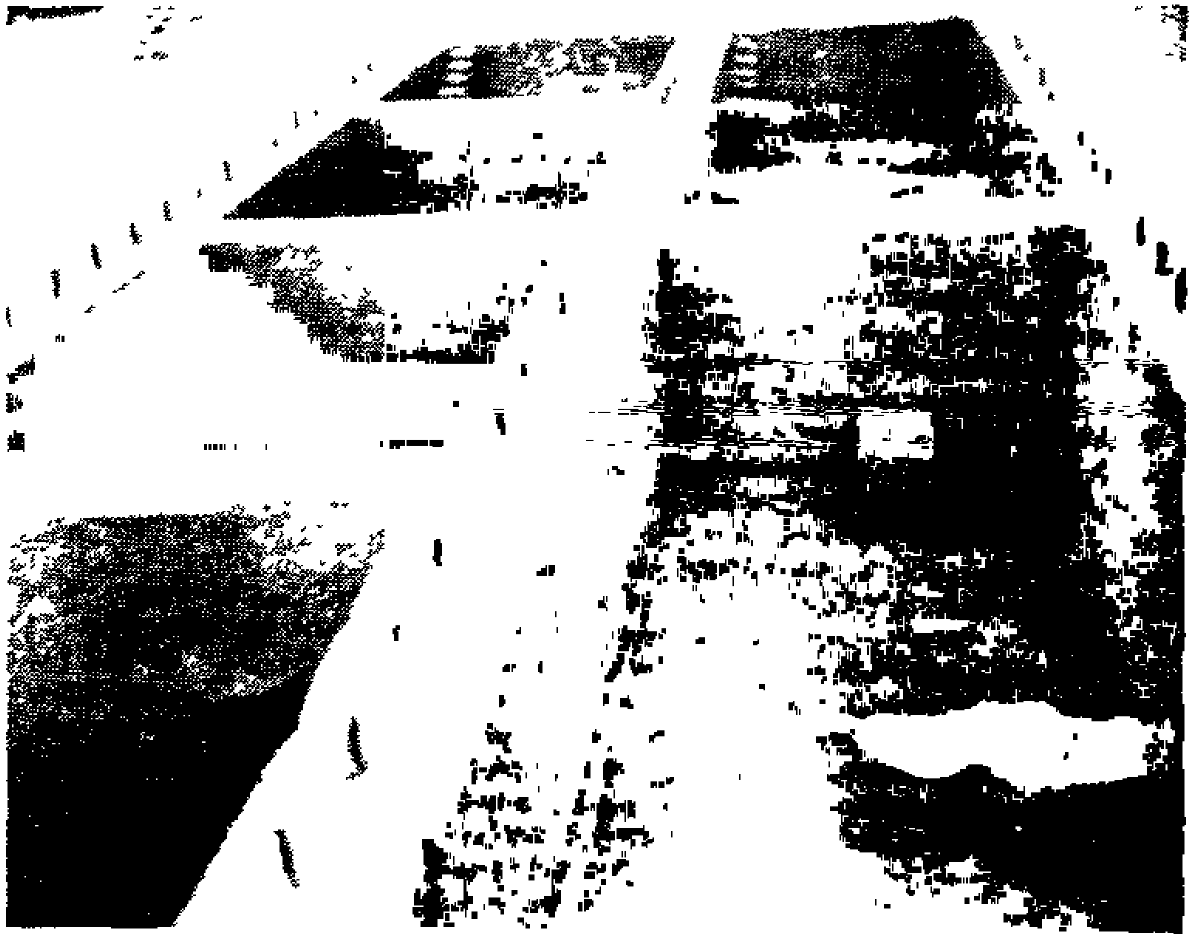

THE DISTRIBUTION OF PROTO-HISTORIC SITES IN THE VALLEY OF KUNOOR AND AJAY IN BURDWAN AND BIRBHUM DISTRICTS
WEST BENGAL
KIRNAHAR
BIRBHUM
KOPAI RIVER
BELUTI
BOLPUR
SURATH RAJAR DHIBI
AJAY RIVER
PANDU RAJAR DHIBI
GOSWAMIKHANDA
RAJAR DANGA
KUNOOR RIVER
BASANTAPUR
MANGALKOT
BURDWAN
KANDAR KHAL
GANGADANGA
KETUGRAM
88°
SCALE OF MILES
2 1 0 2 4 6
E D Sampson.
88°

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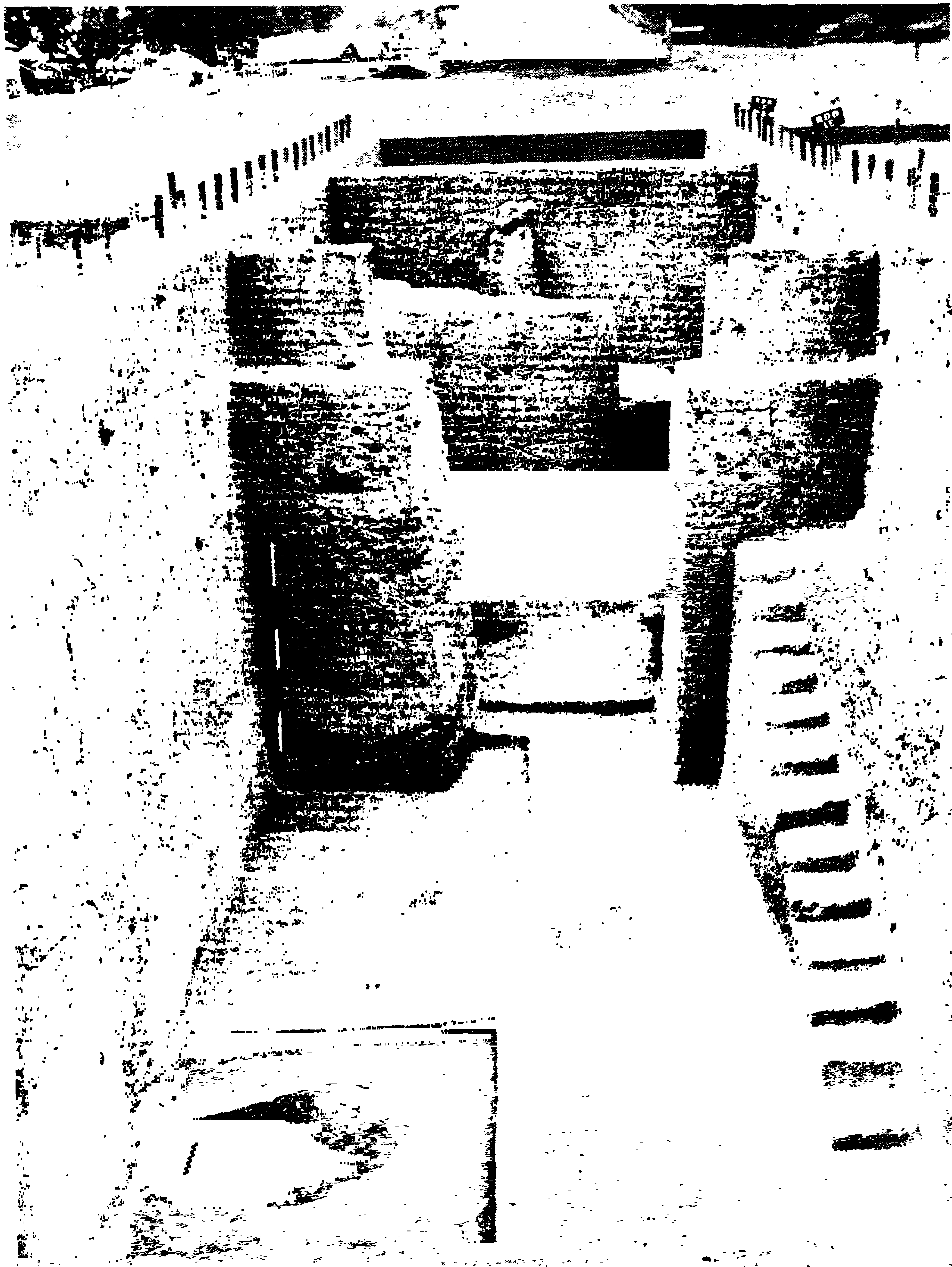


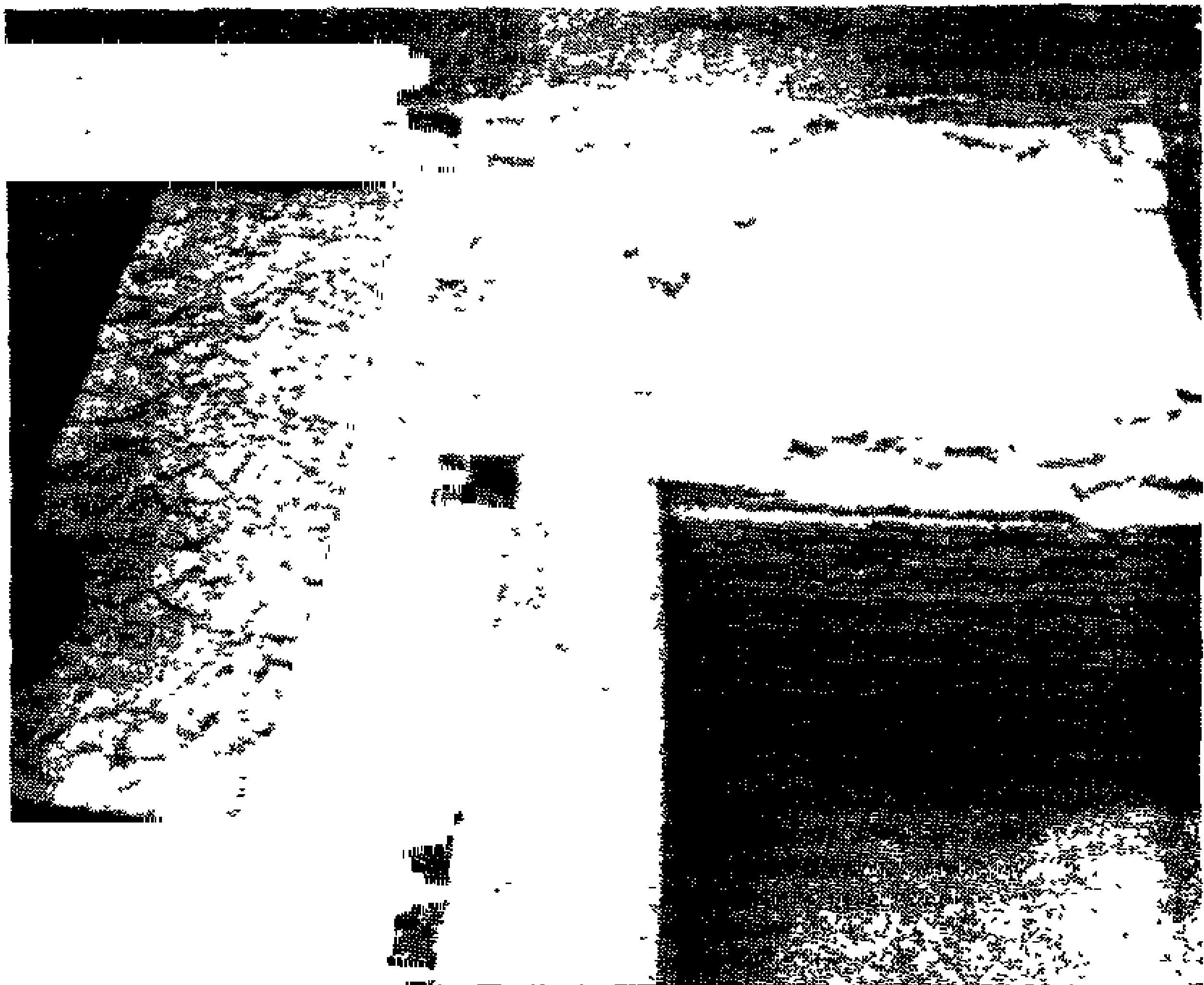
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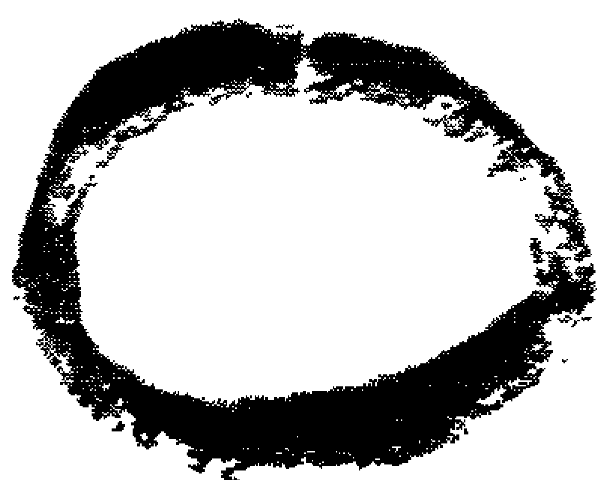
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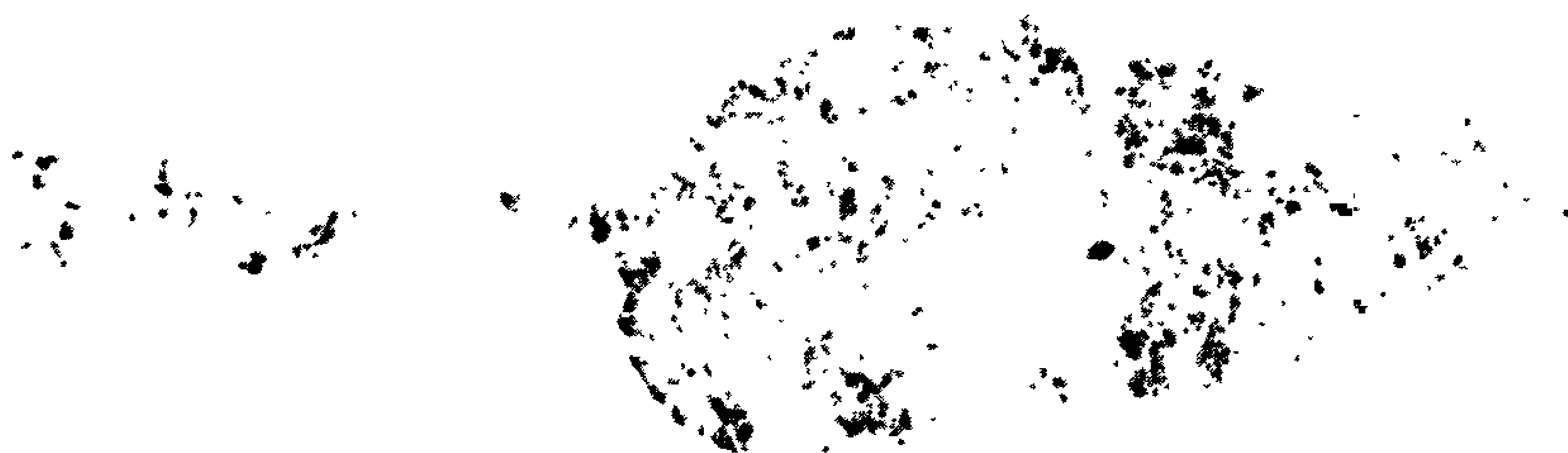




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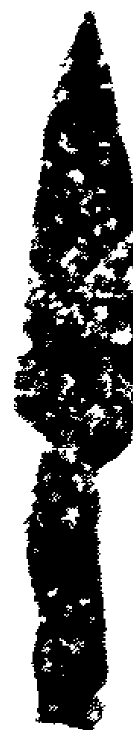




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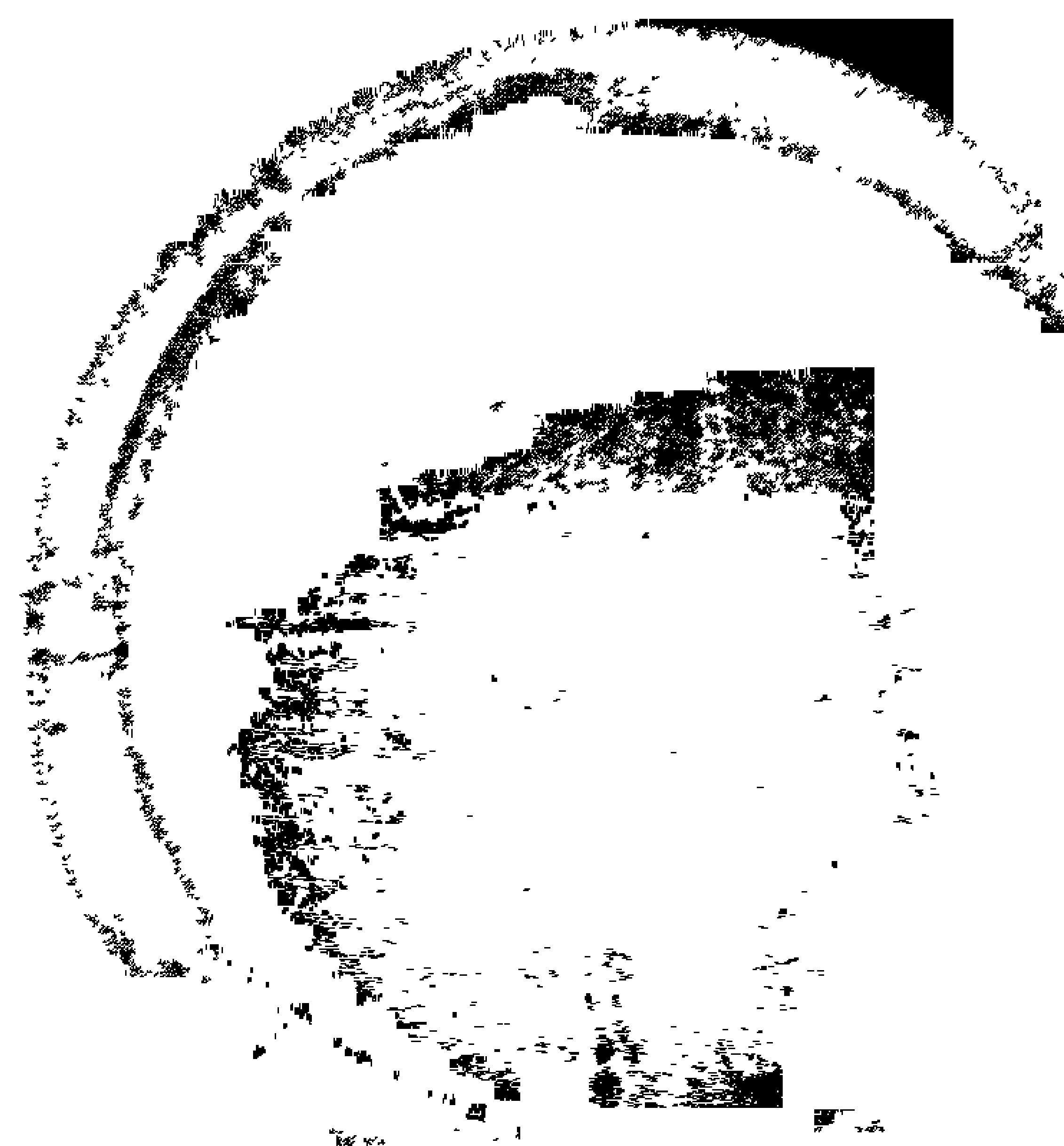
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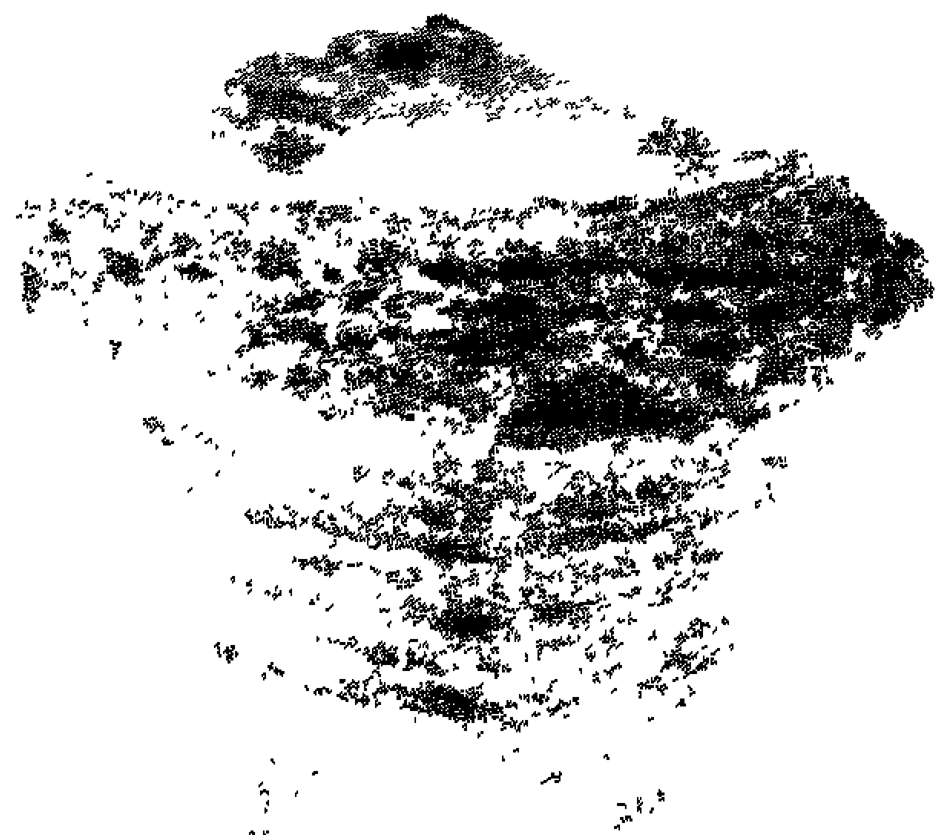
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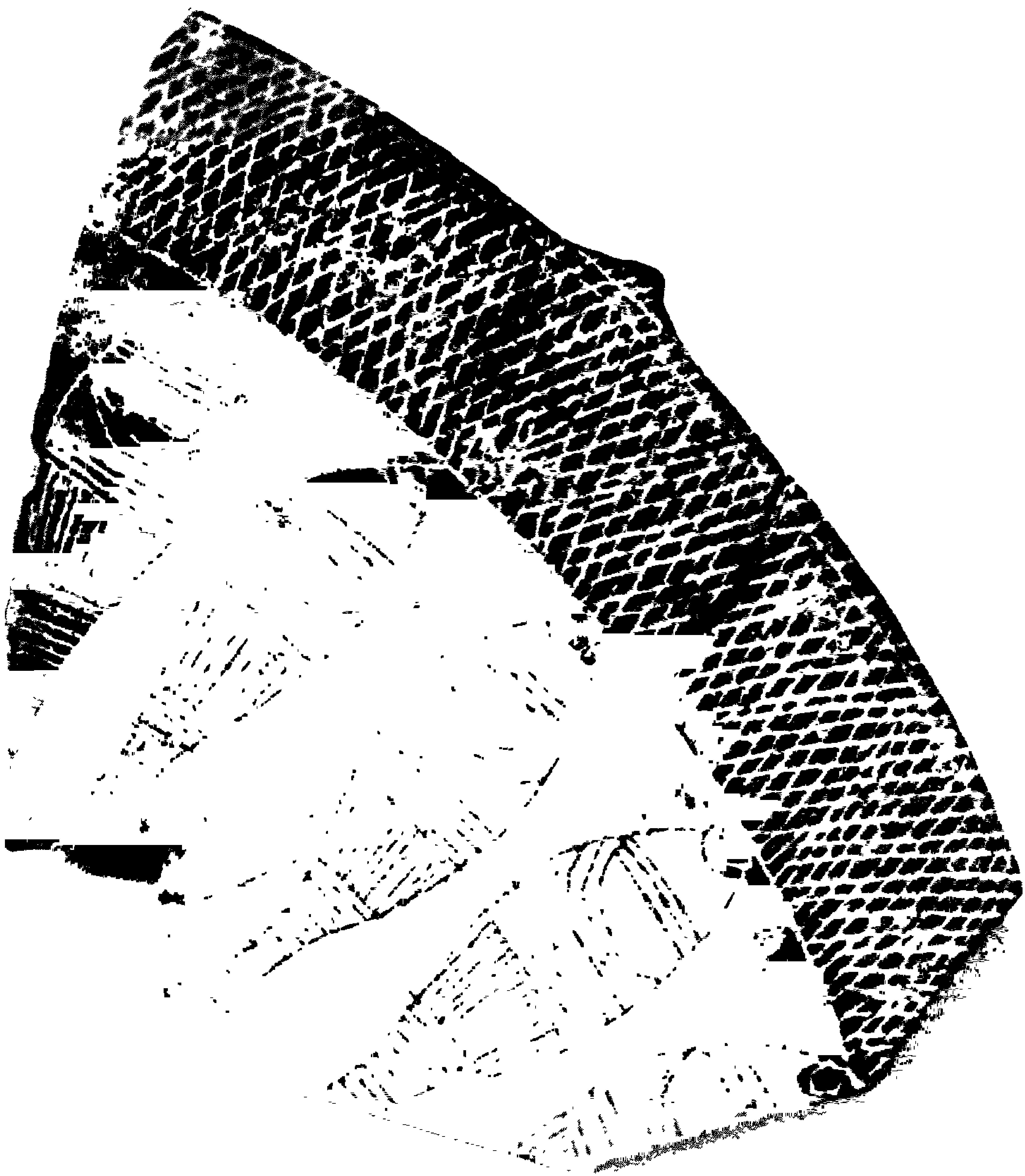
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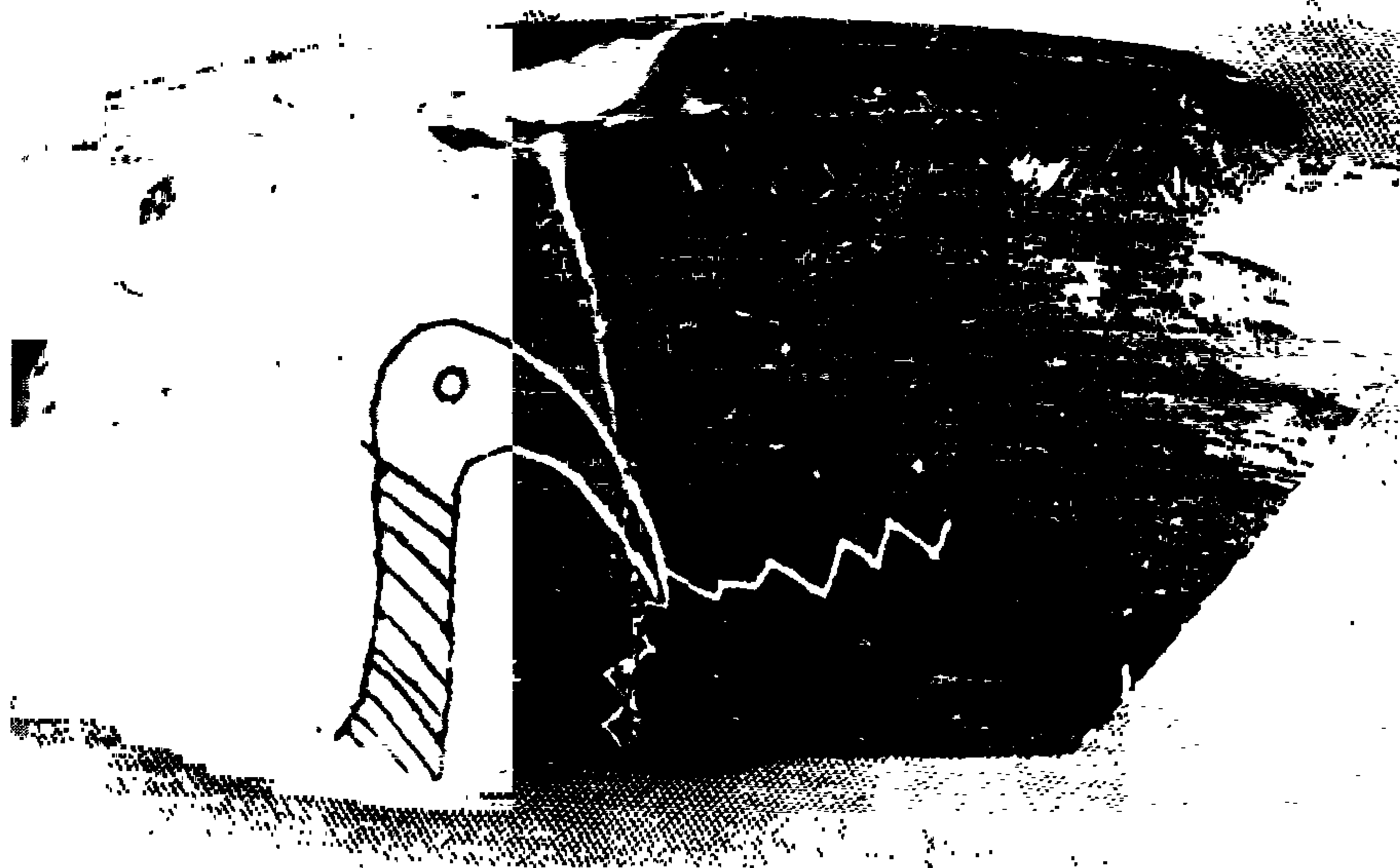
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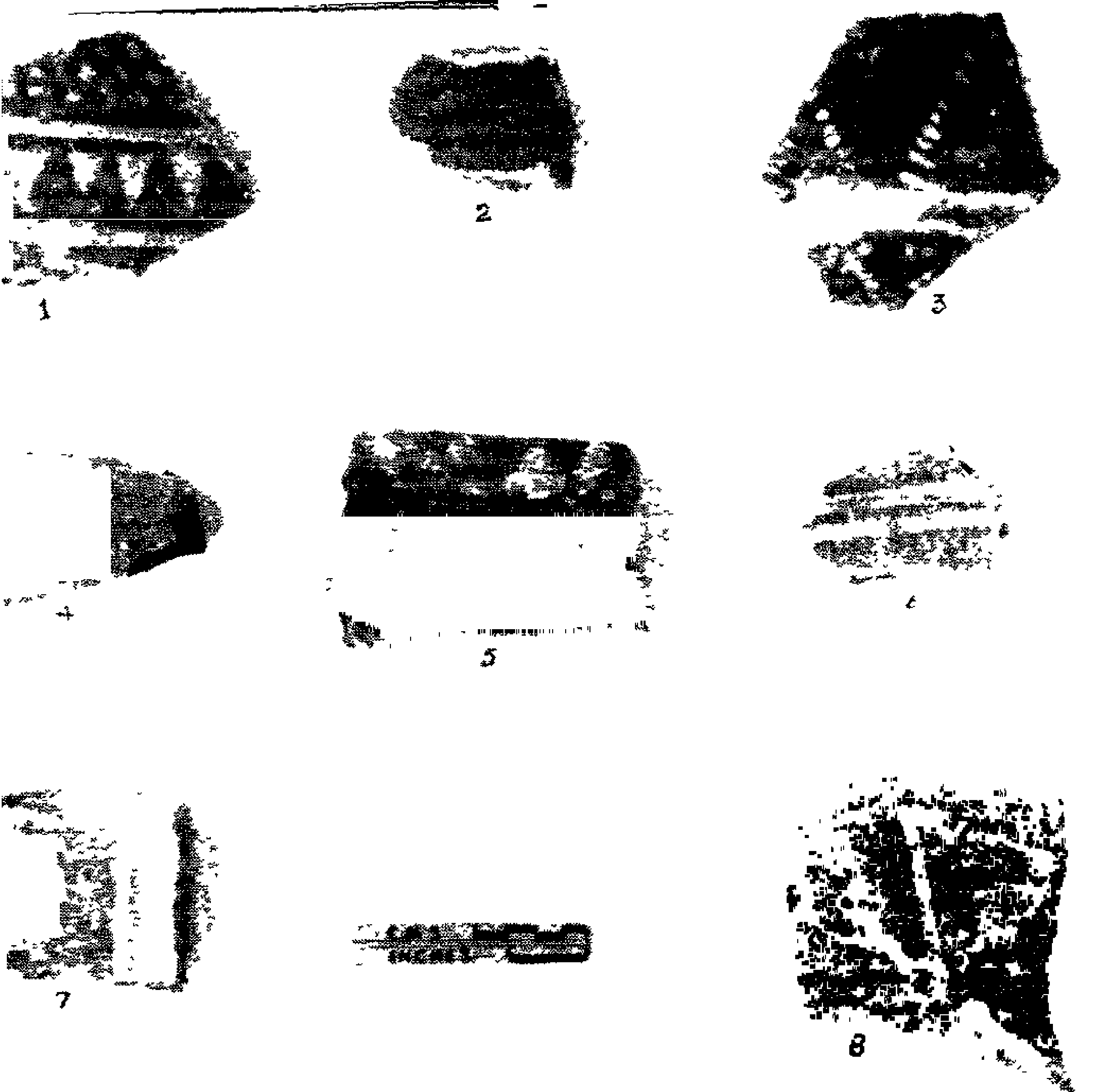


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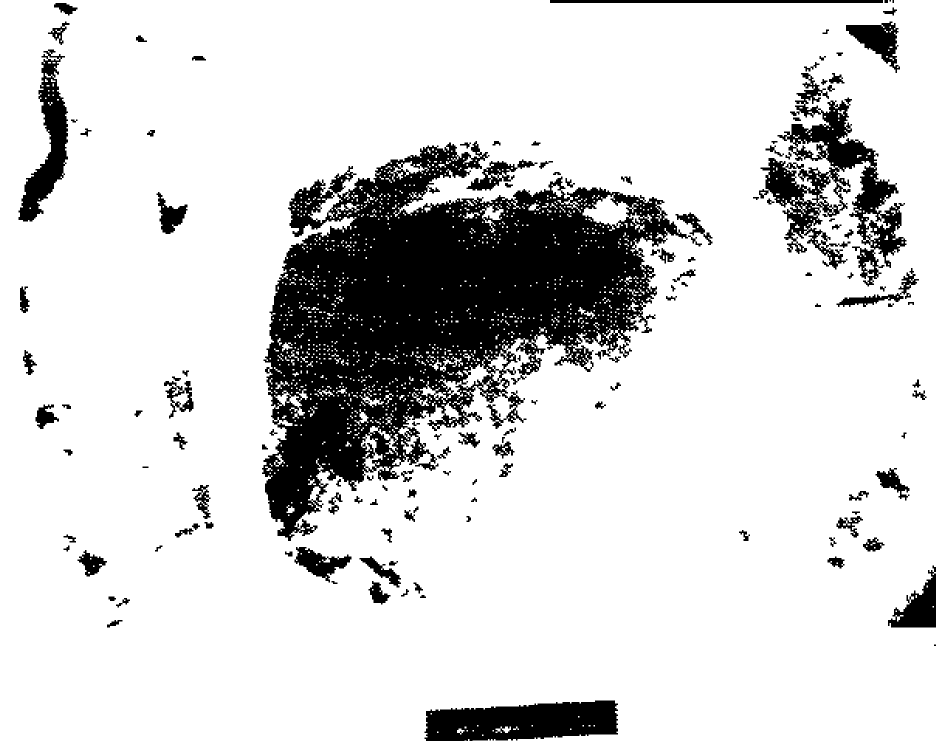


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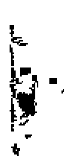
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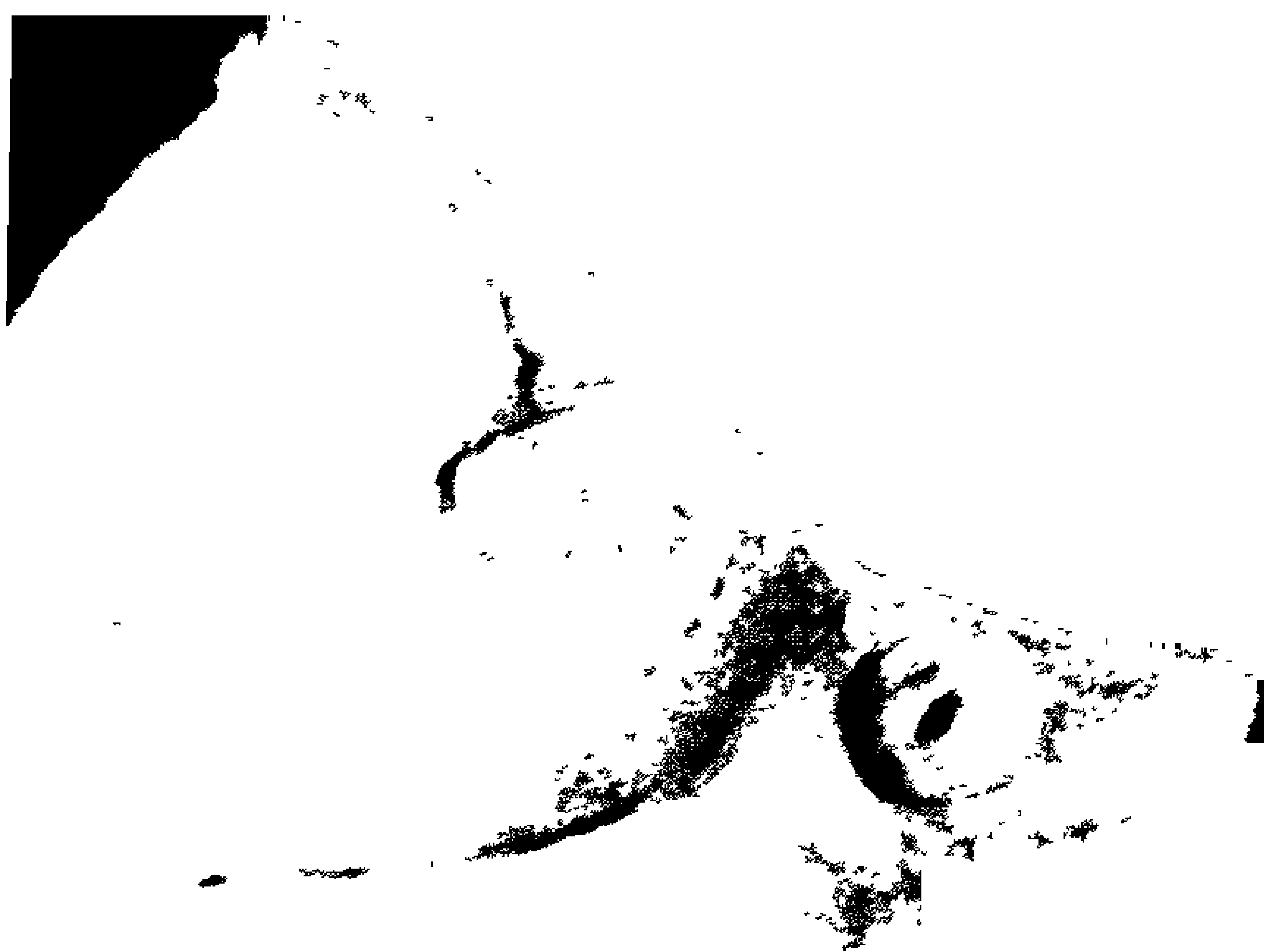






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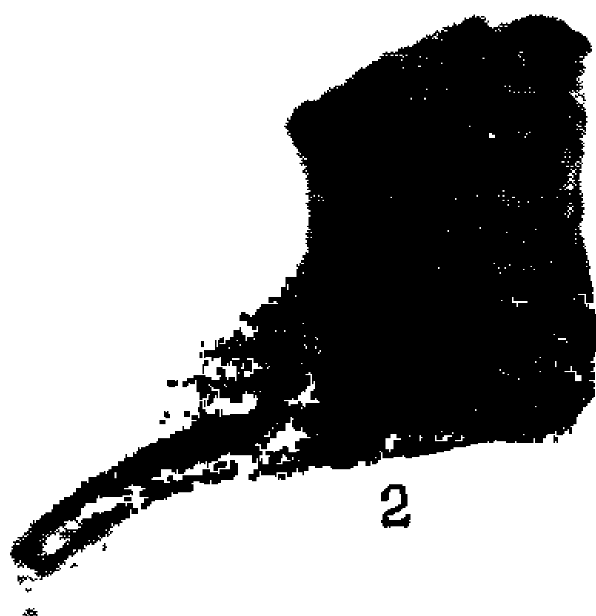




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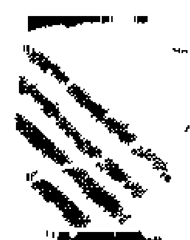


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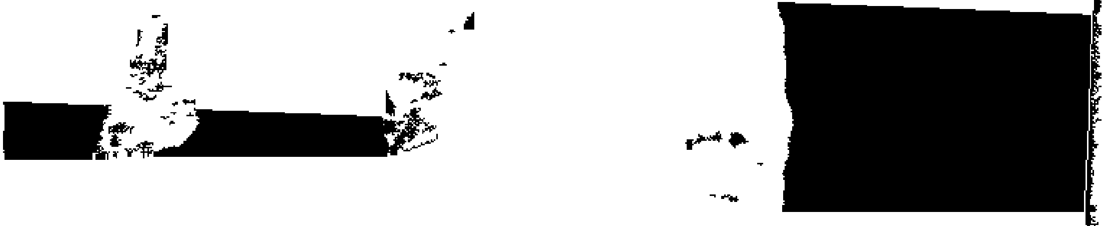


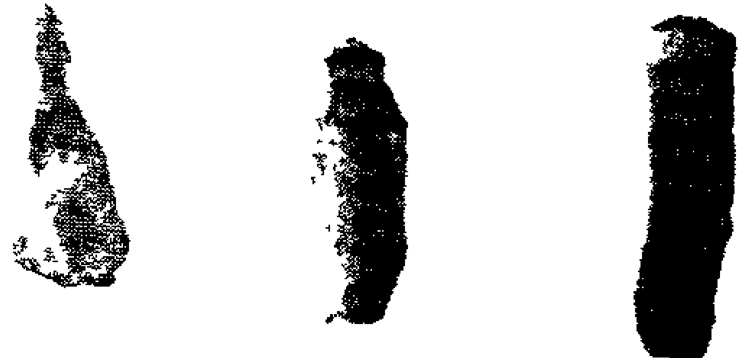






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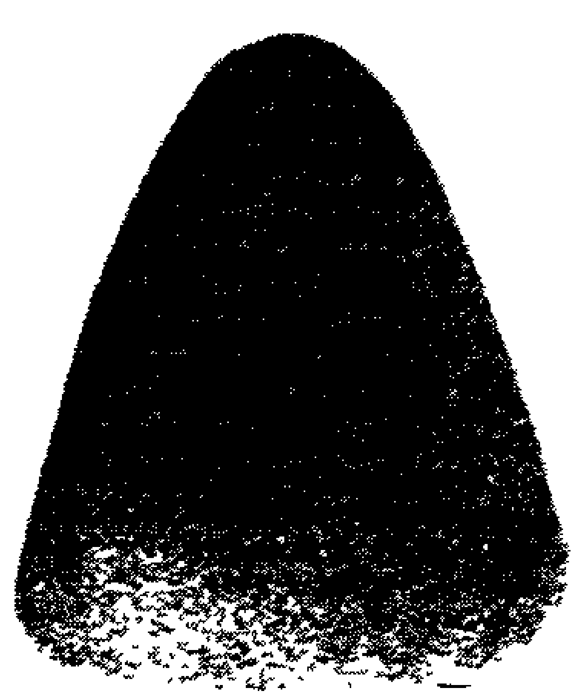
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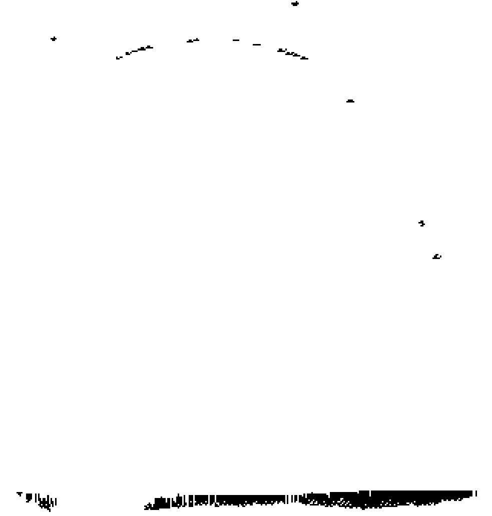


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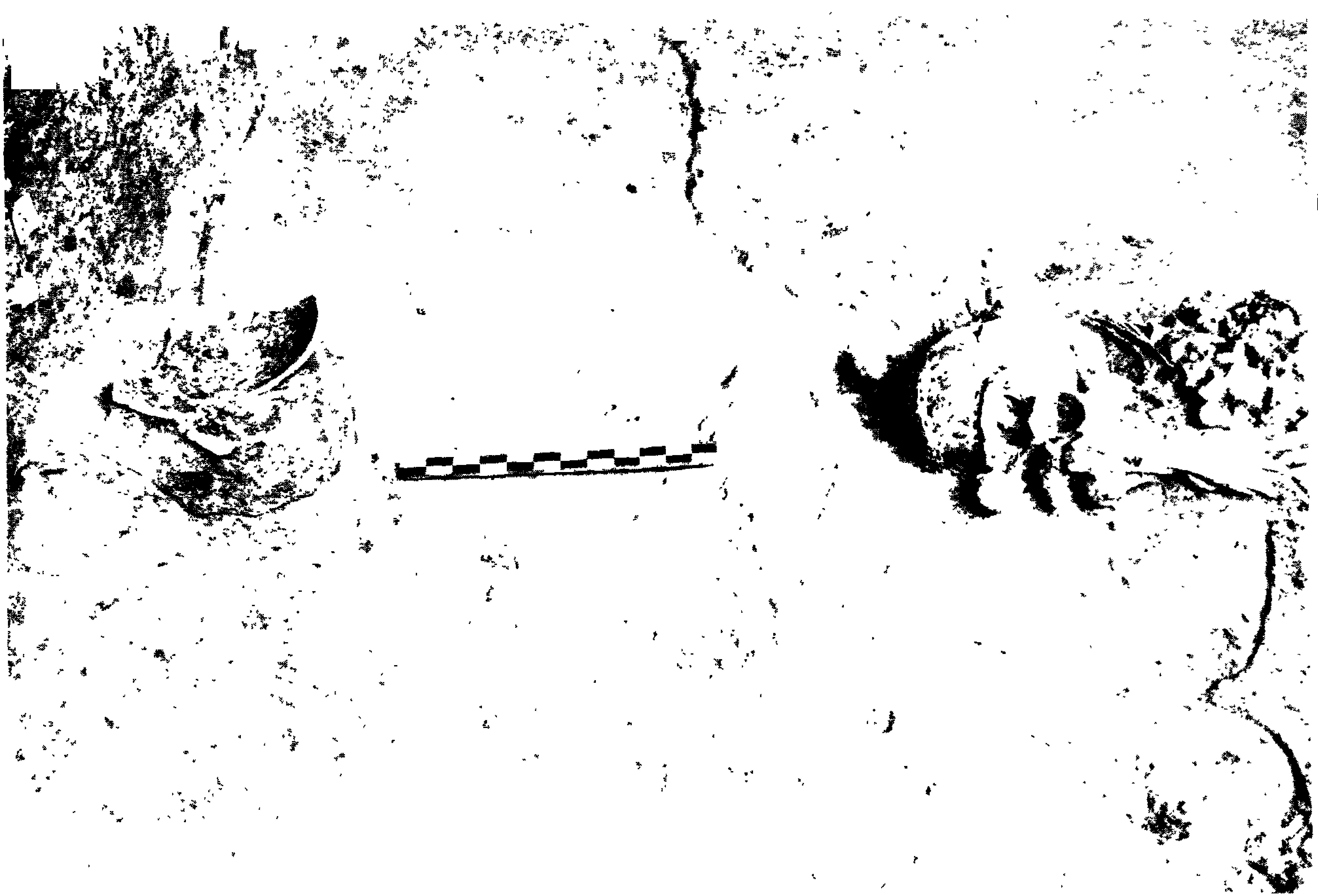
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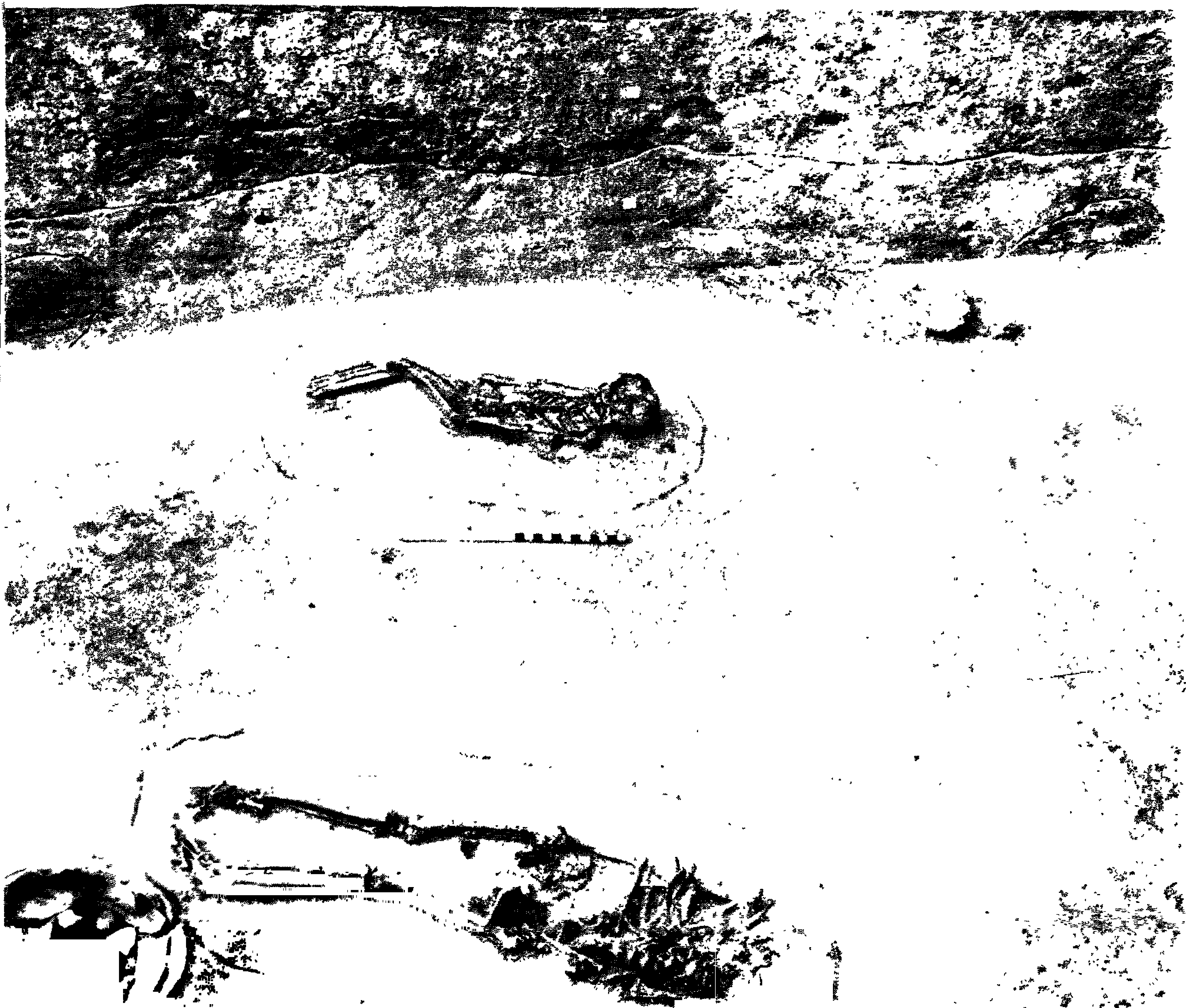


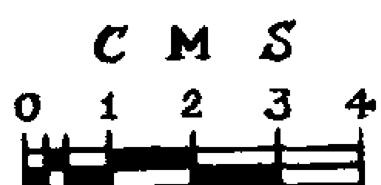


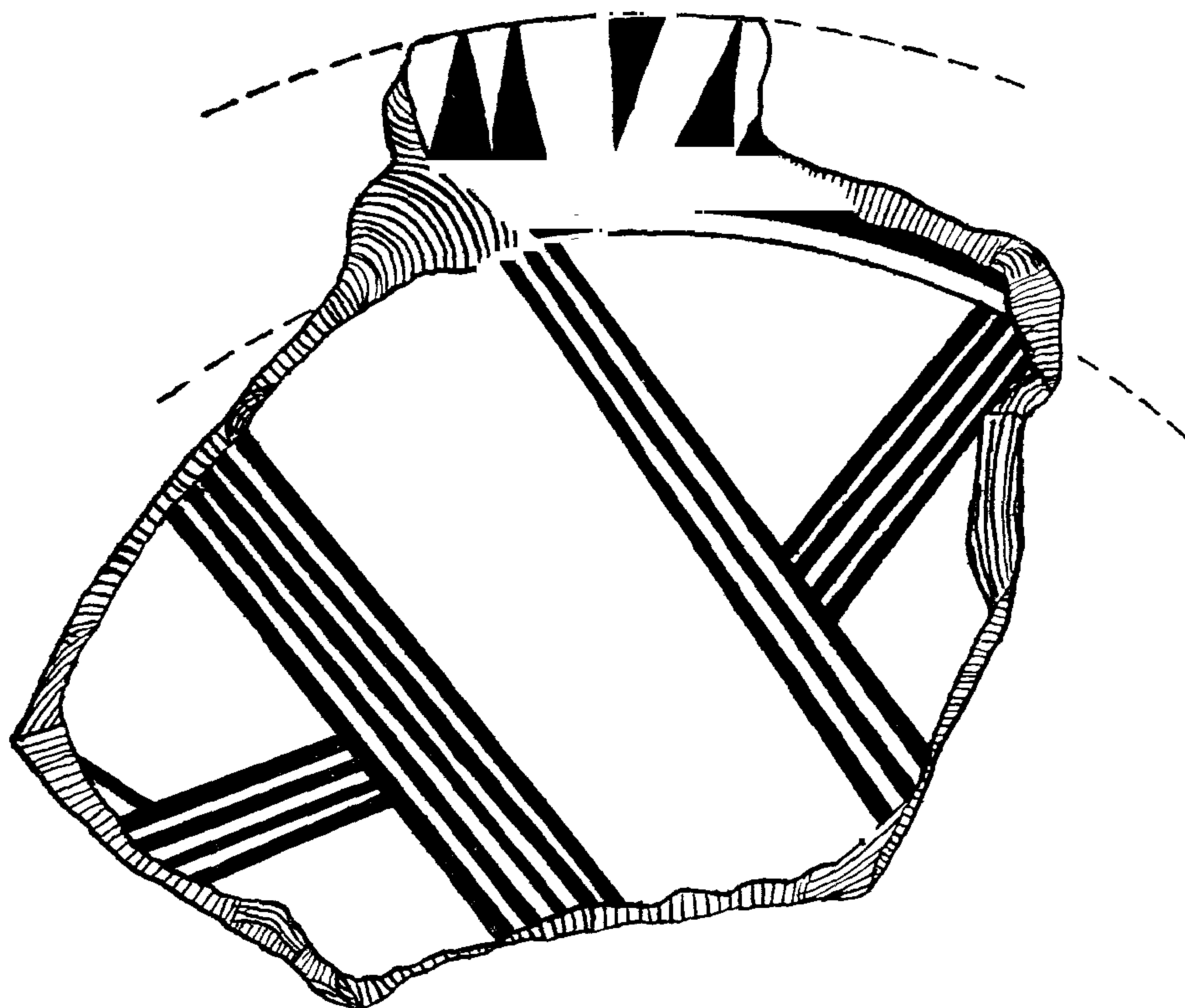


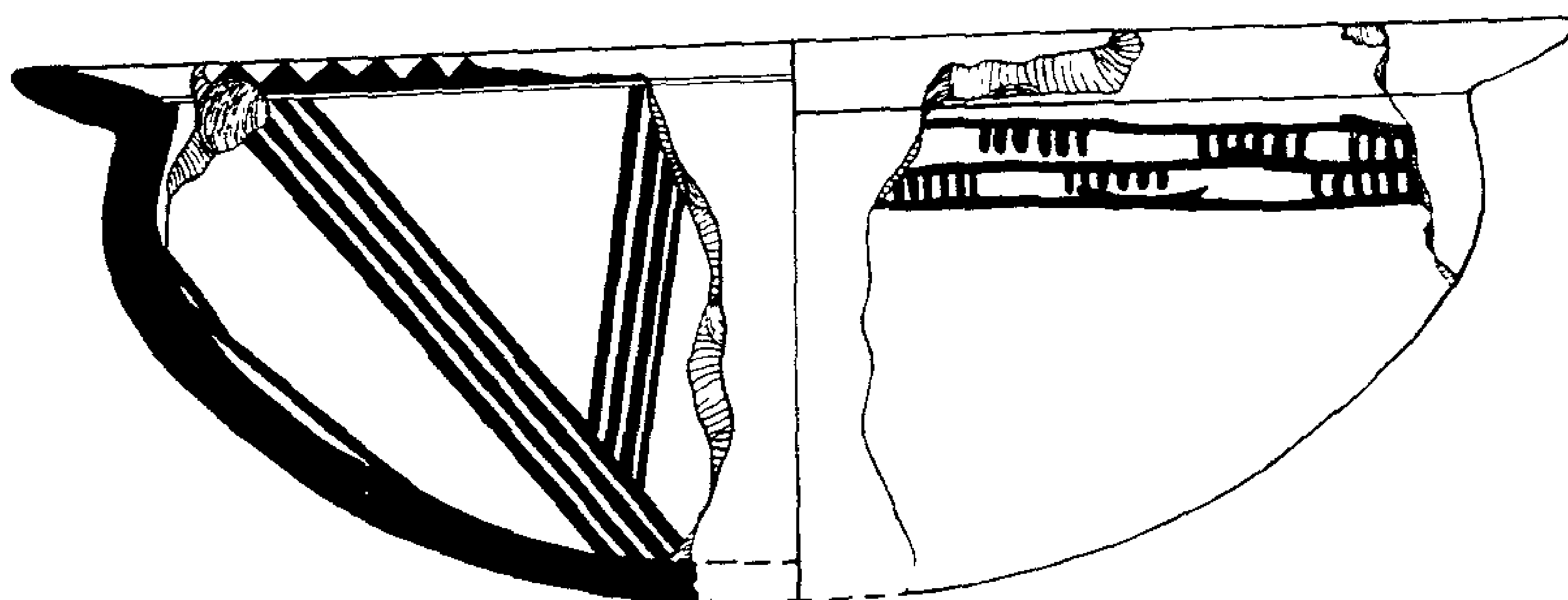
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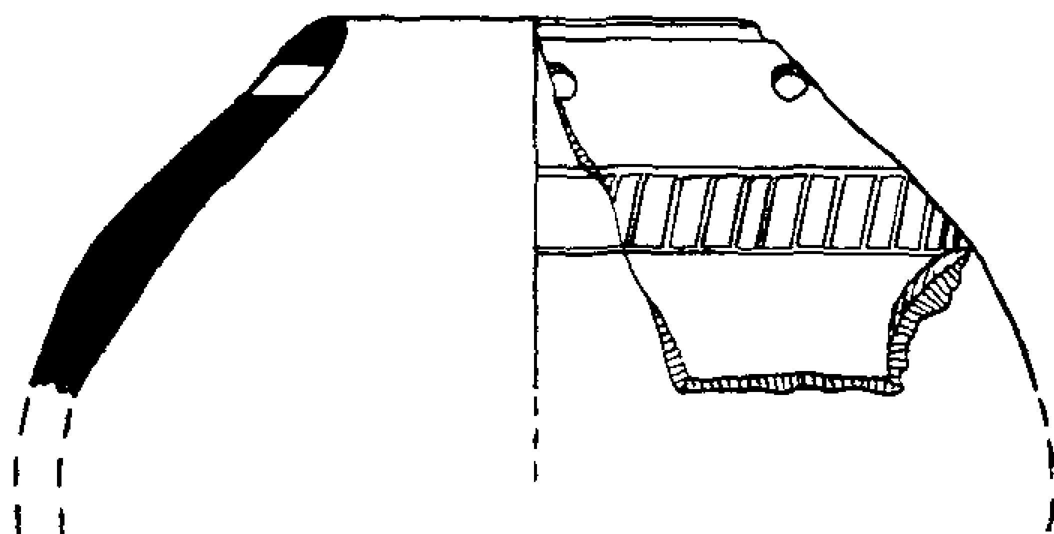






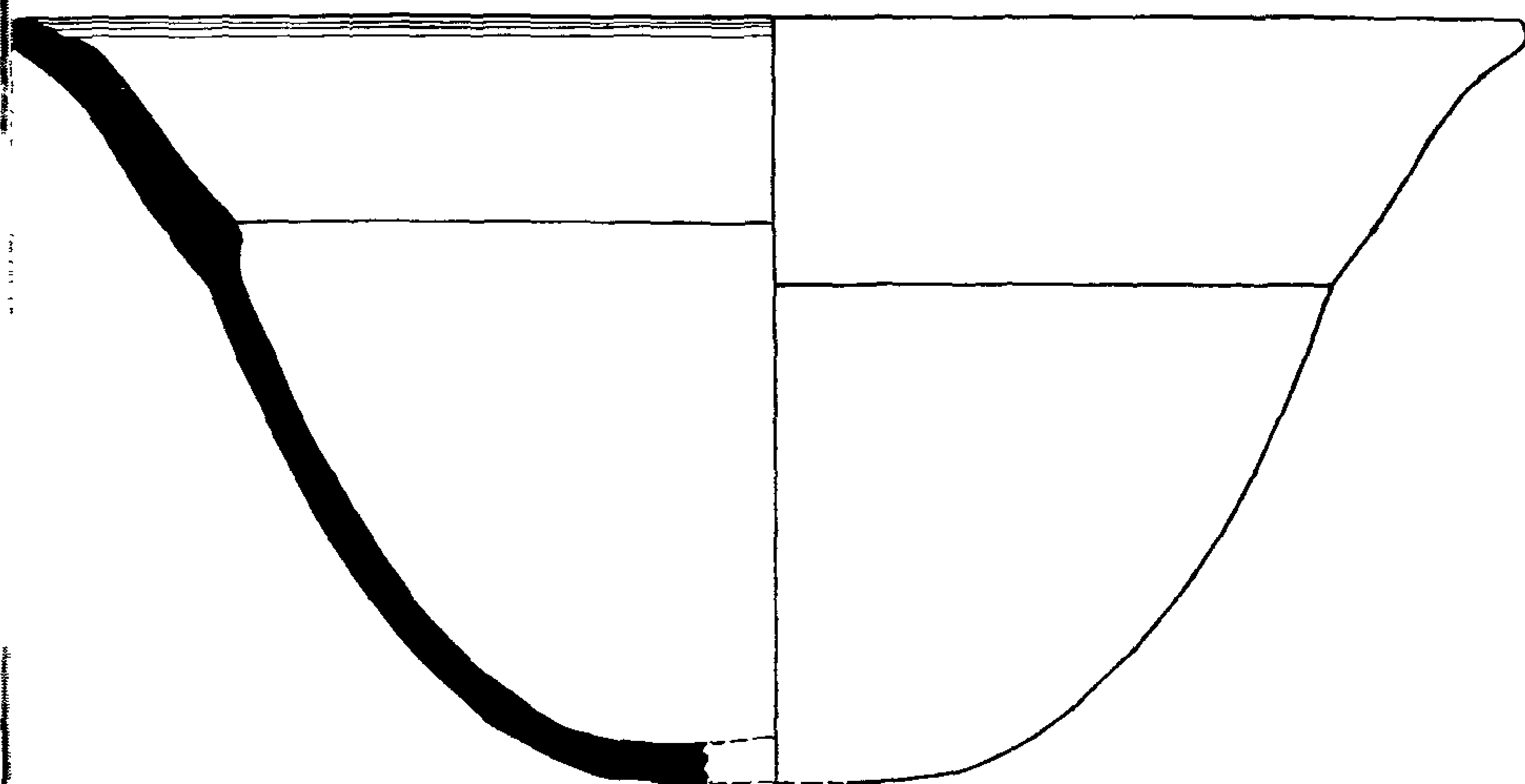


Bowl of chocolate ware painted in creamish white.
PERIOD II



Perforated vase with incised decoration.

PERIOD II

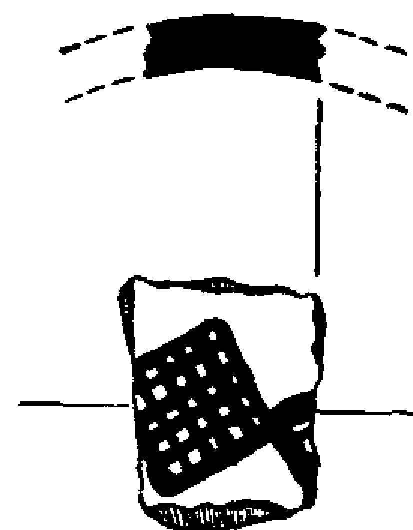


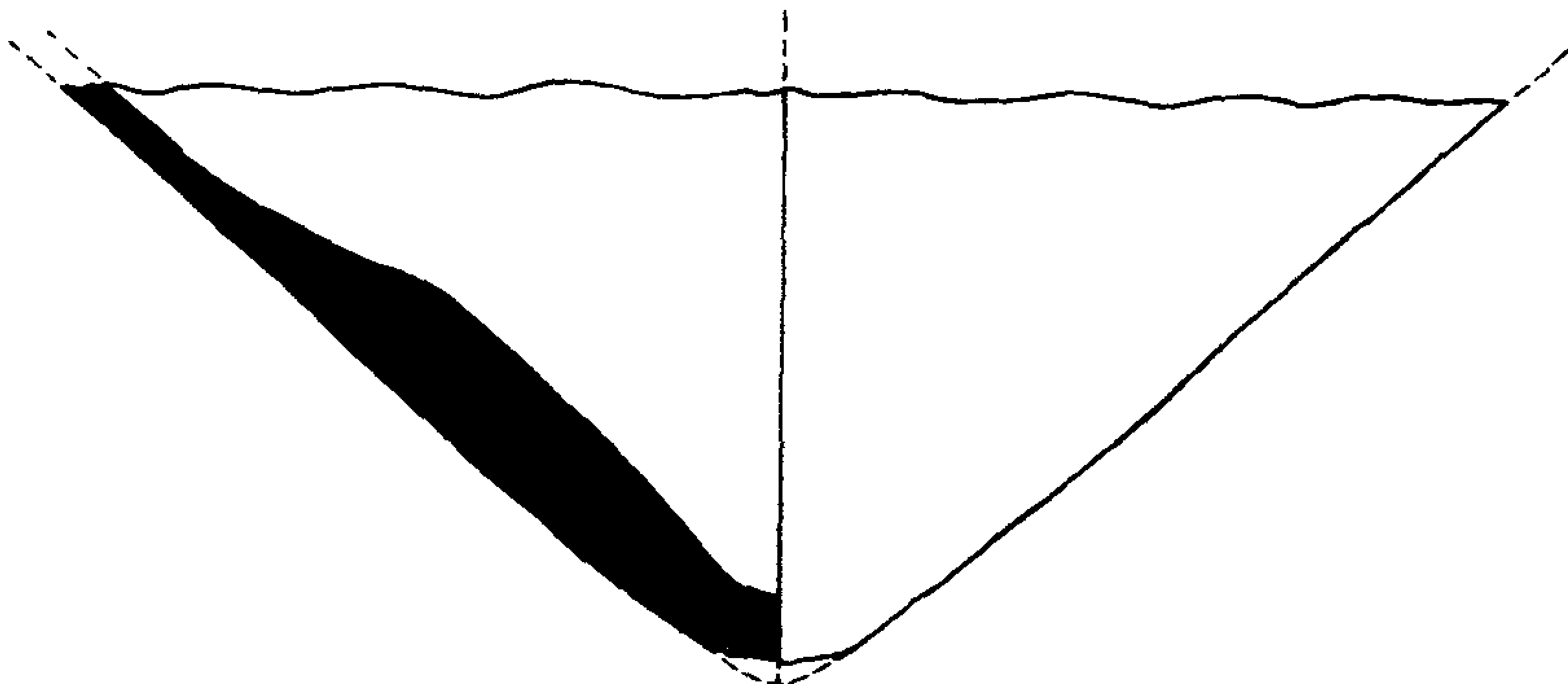
Inverted helmet shaped bowl of black-and-red ware.

PERIOD II

Fragment of lustrous red ware painted with hatched diamonds in black.

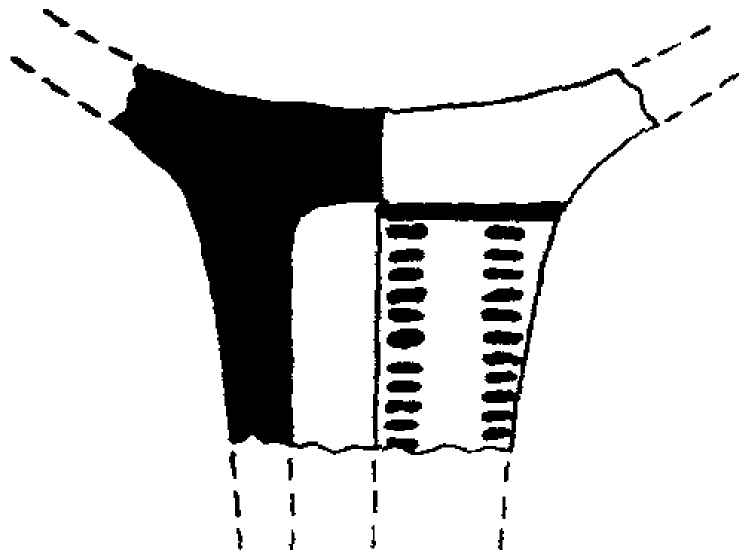
PERIOD II





A plain vase of thick fabric and conical base.

PERIOD IV

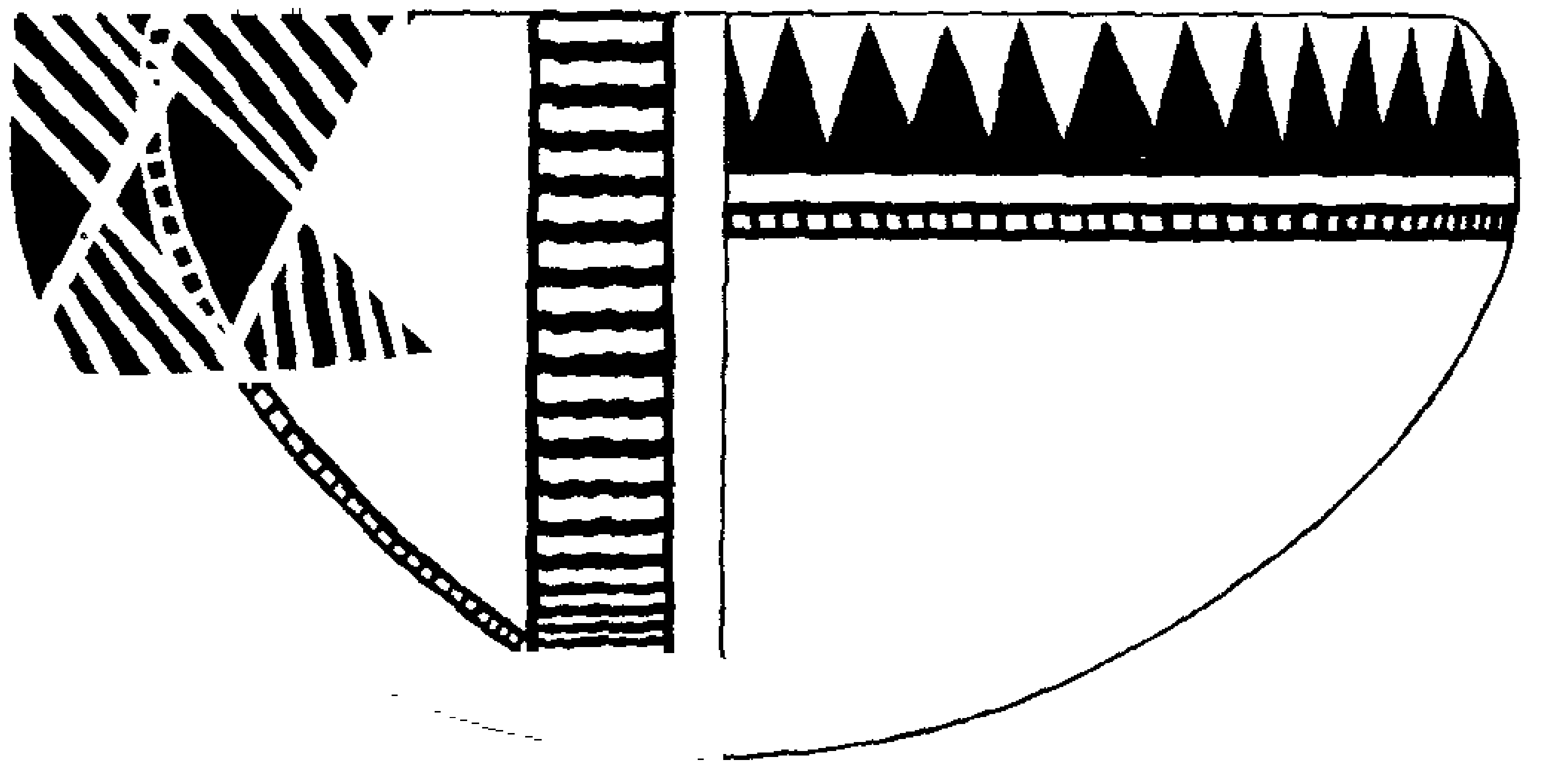


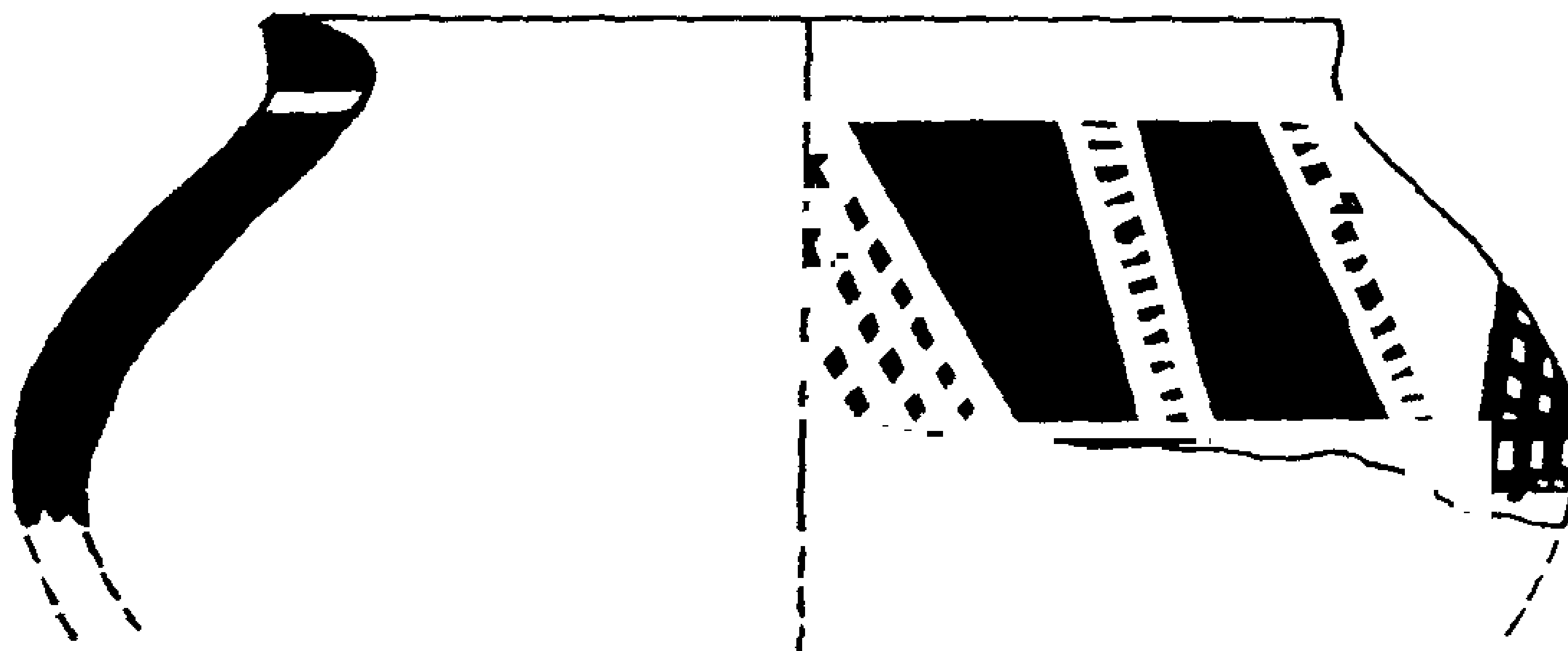
Fragment of a painted bowl-on-stand in red ware.

PERIOD II

A bowl of lustrous red ware painted in black. The drawing has been reconstructed from faint traces of painting. Cemetery level.

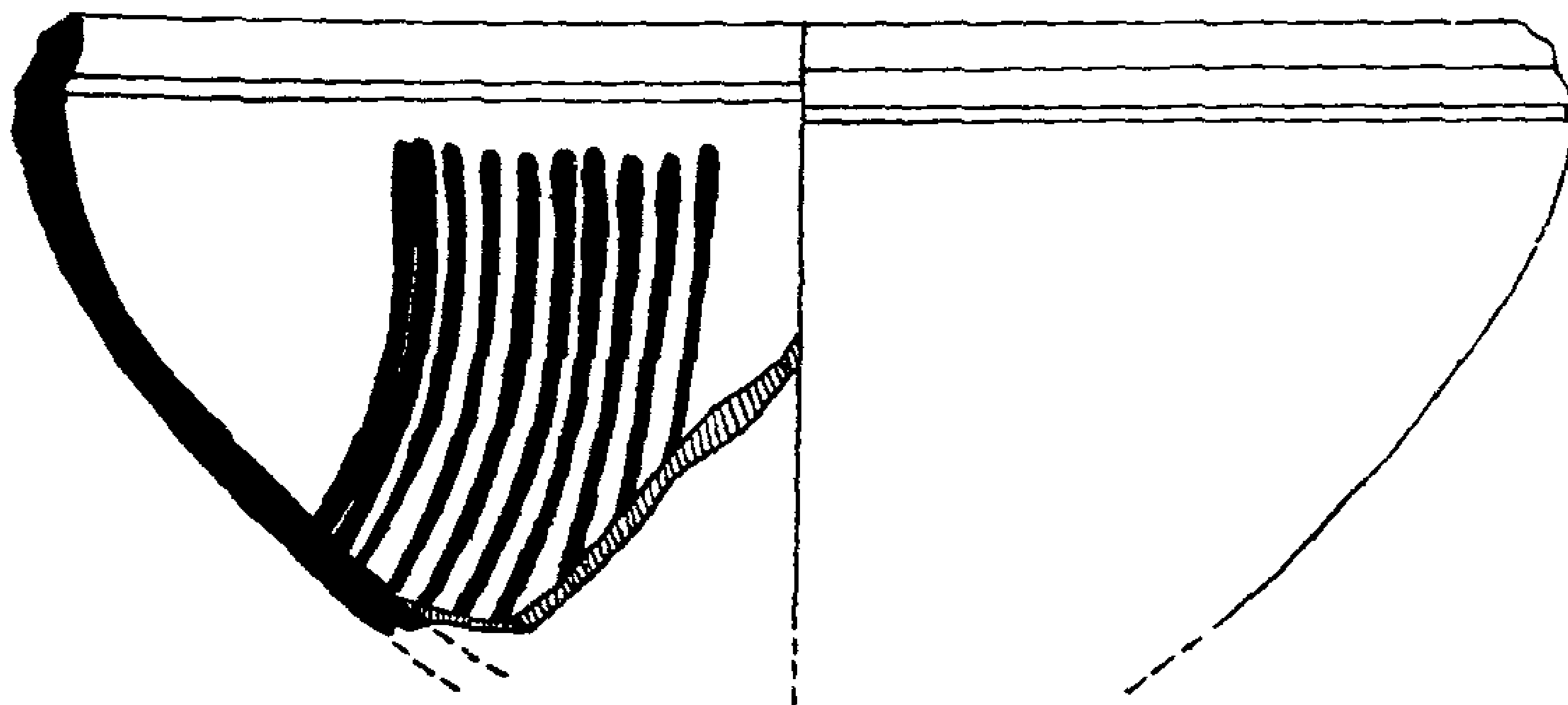
PERIOD II





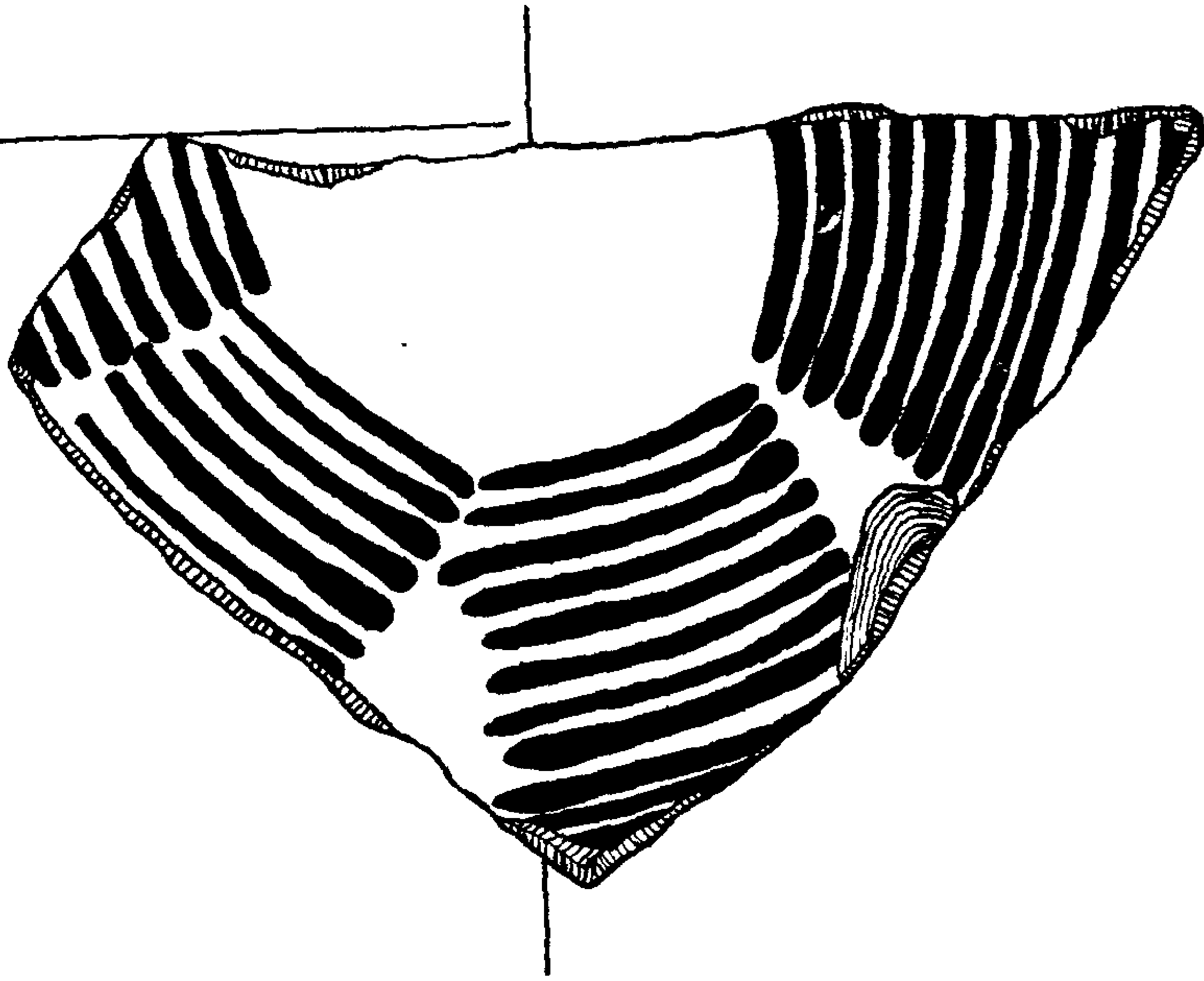
A small vase of chocolate-brown ware painted in creamish white.

PERIOD III

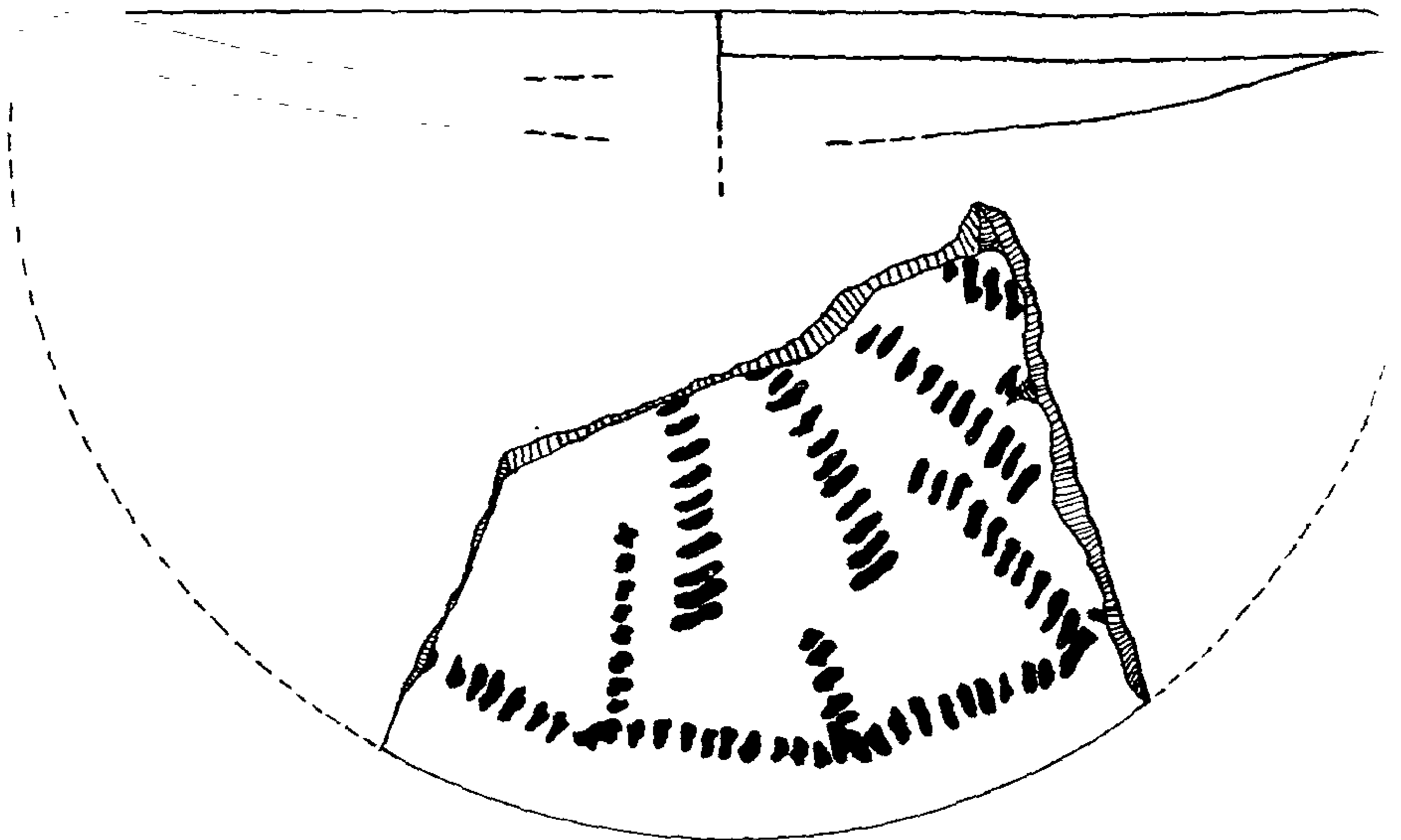


White painted bowl of black-and-red ware.

PERIOD III



Fragment of a black-and-r
ware bowl painted in whit
PERIOD II

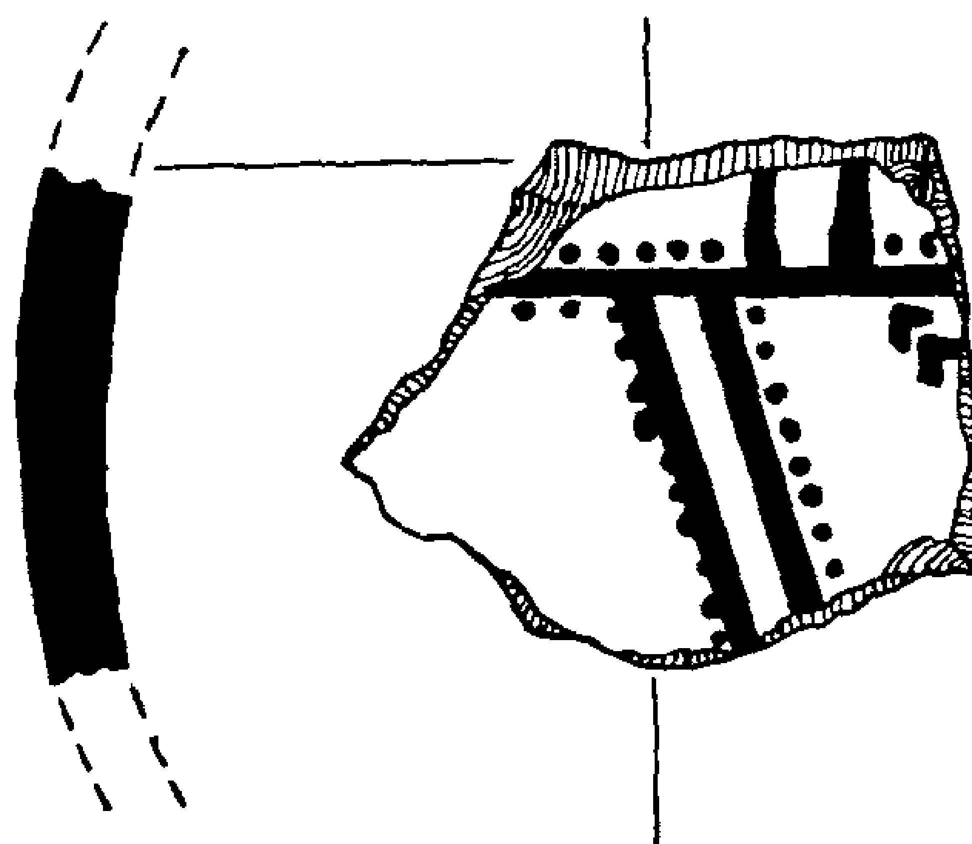


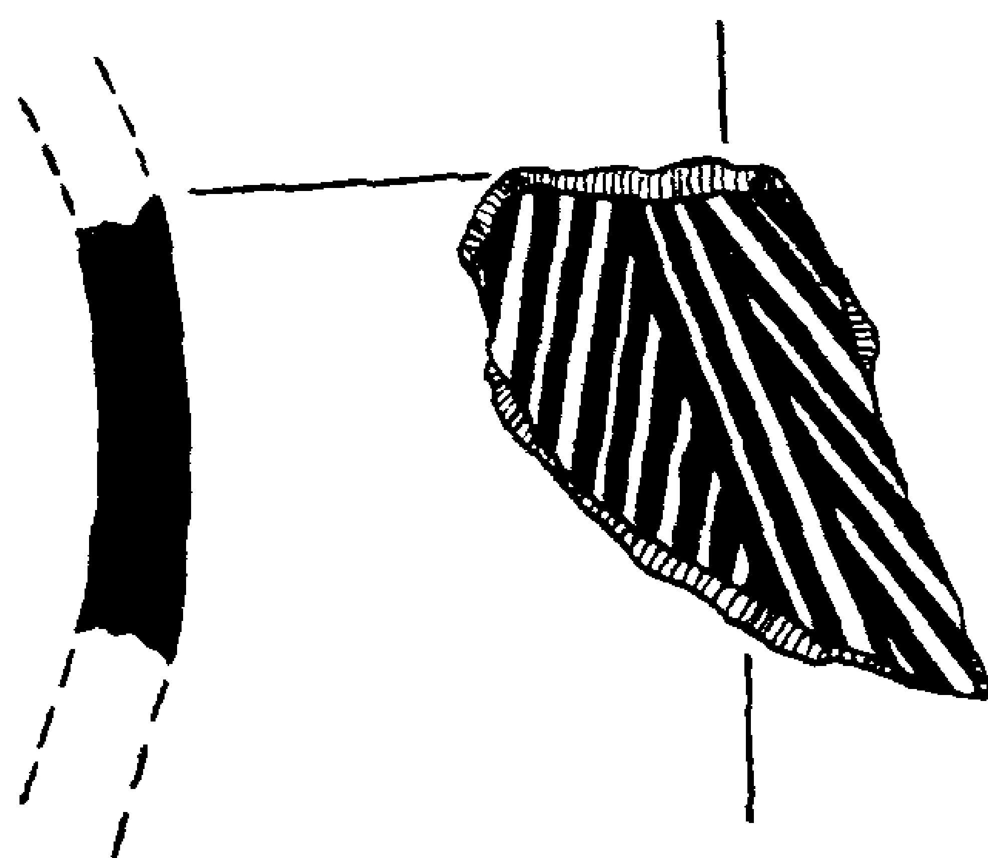
A trough of black-burnished ware painted in creamish white.

PERIOD II

A sherd of black-painted red ware.

PERIOD III



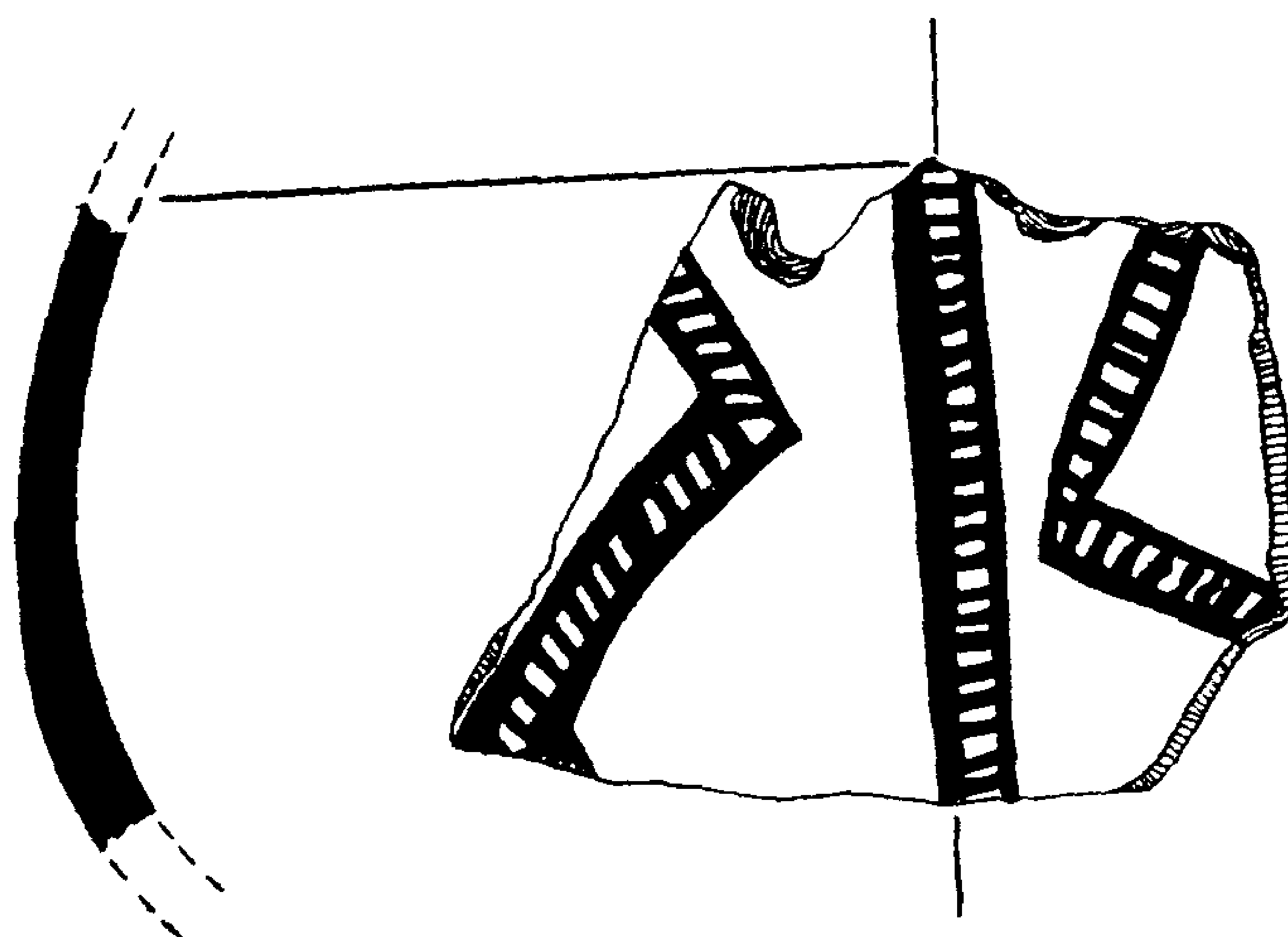


A sherd of black-painted red ware.

PERIOD III

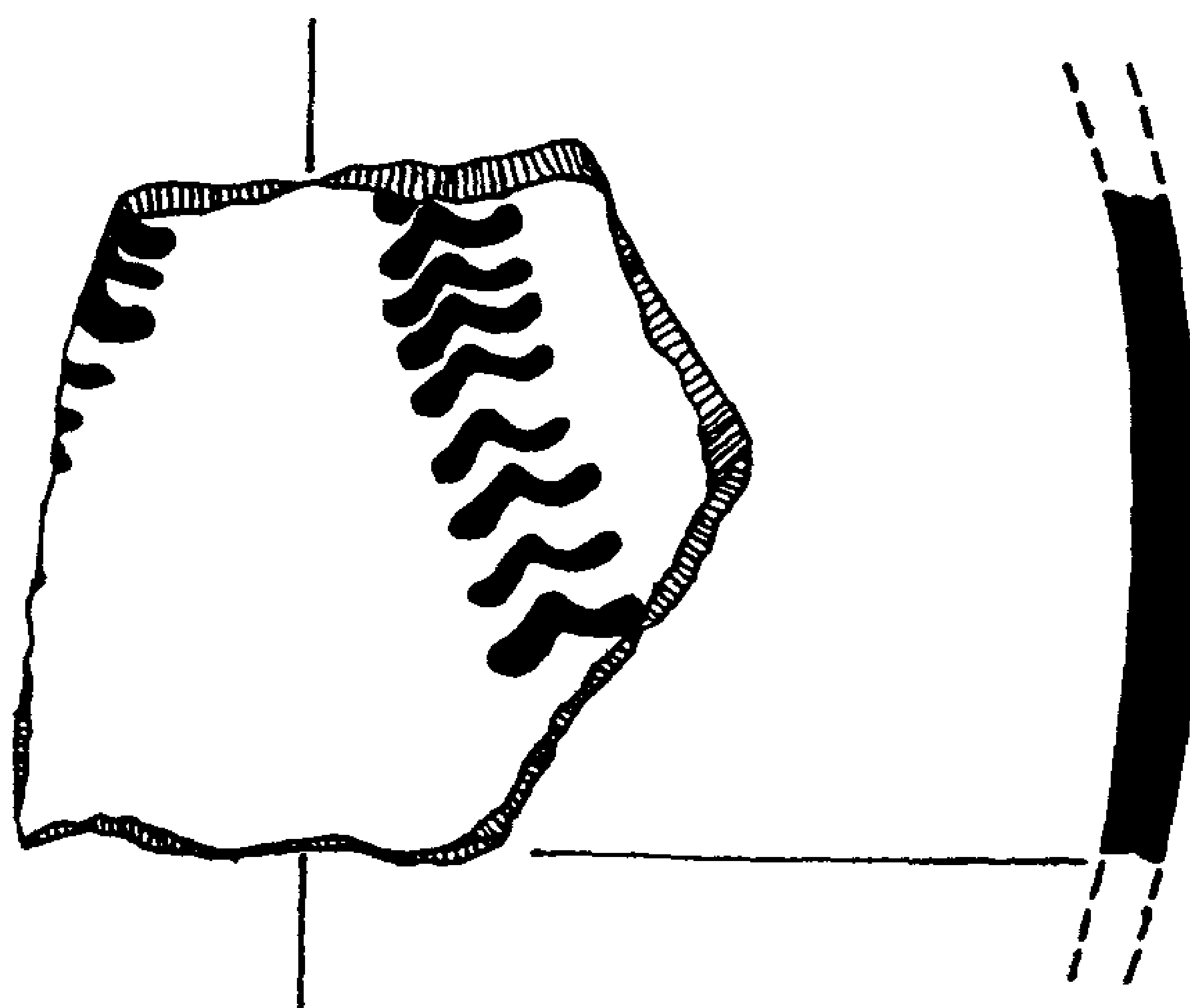
Black-painted red ware.

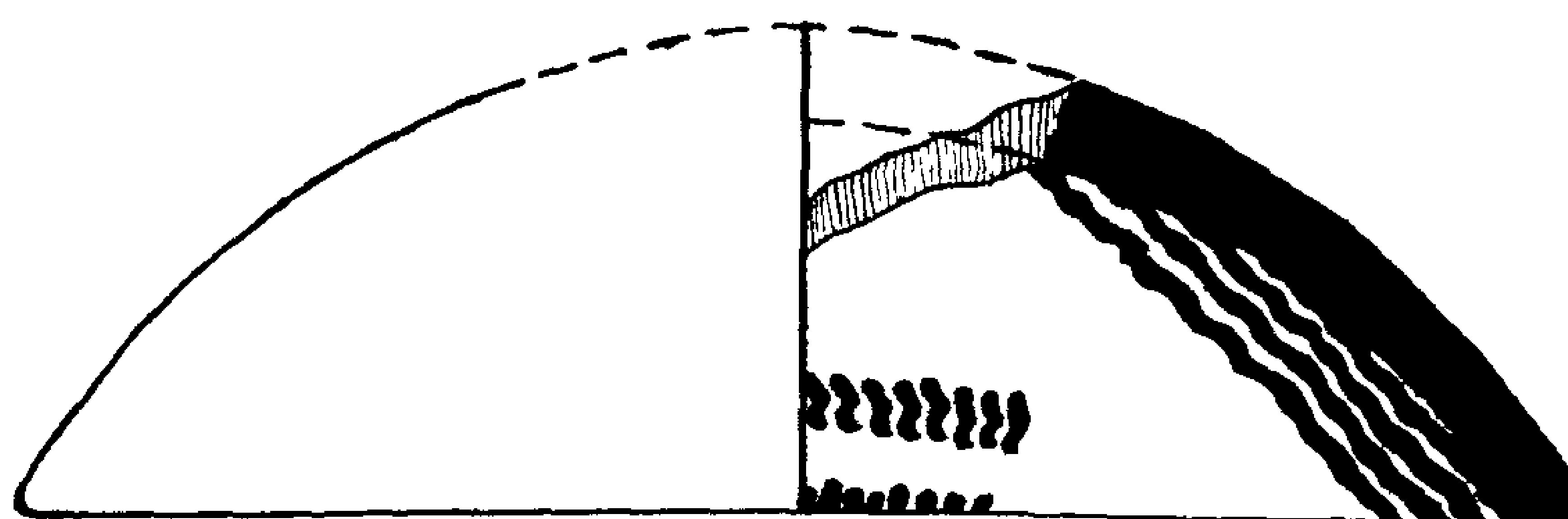
PERIOD II

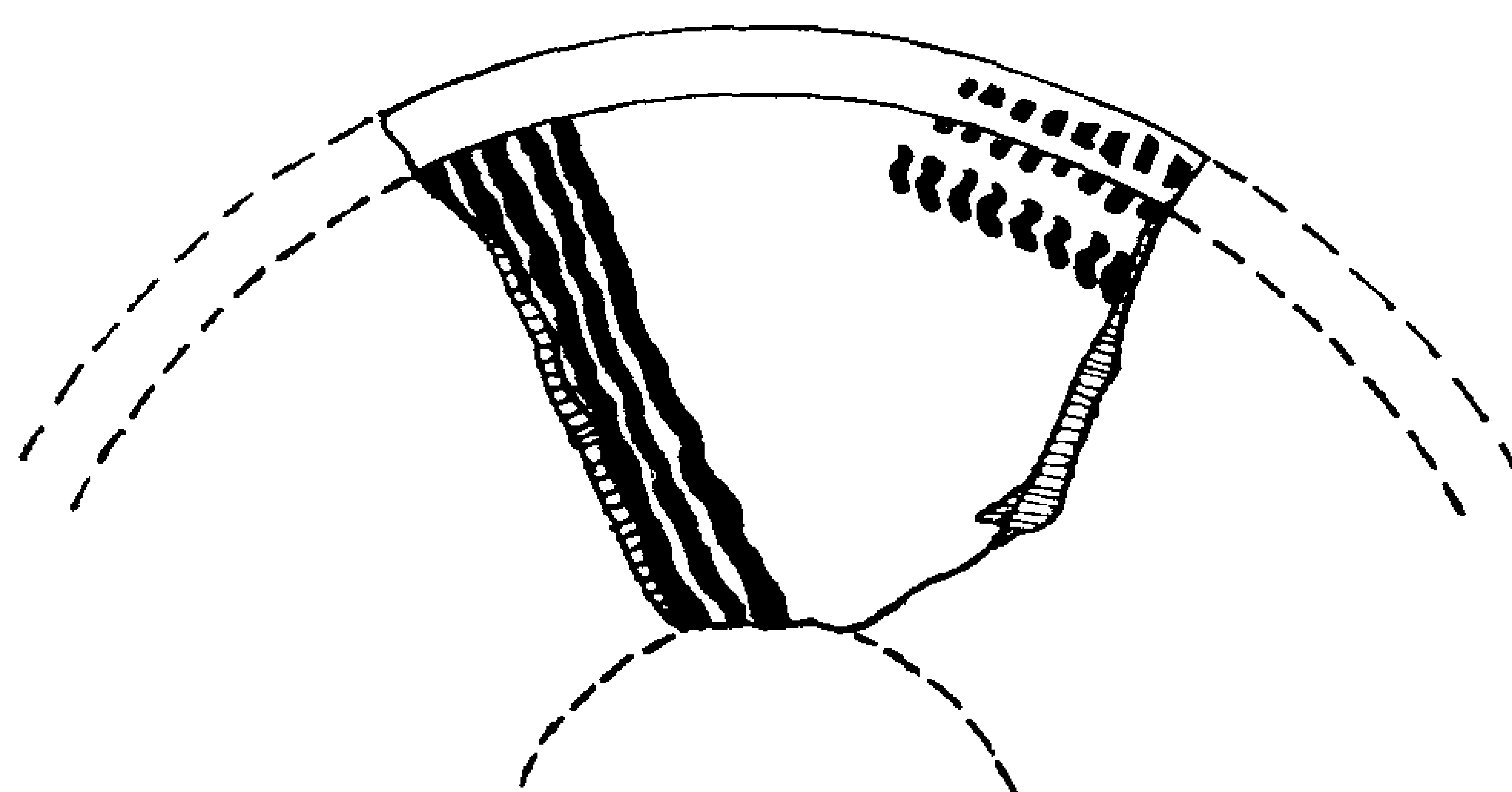


A sherd of white-painted black-and-red ware.

PERIOD III

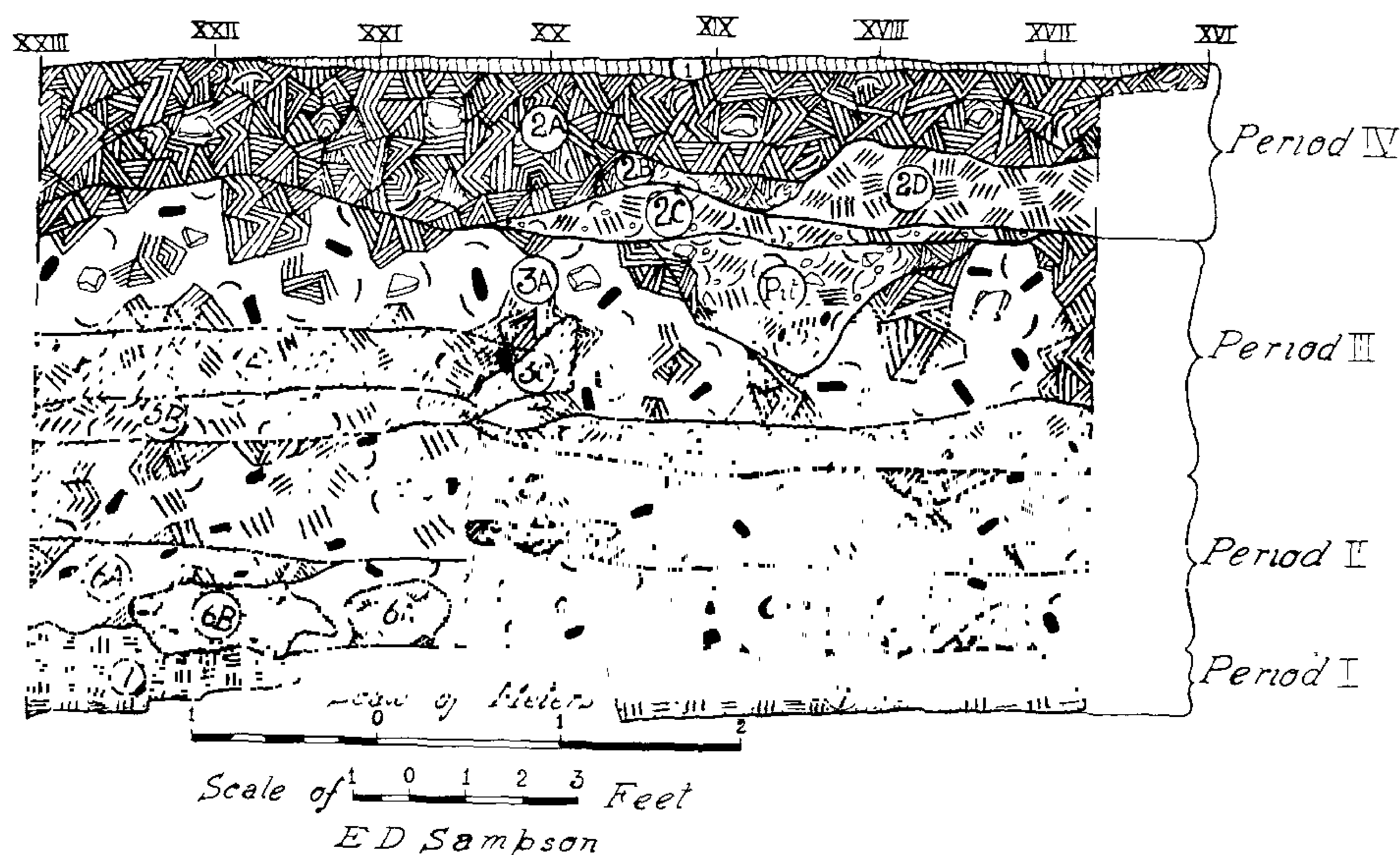






A small bowl of lustrous red ware.

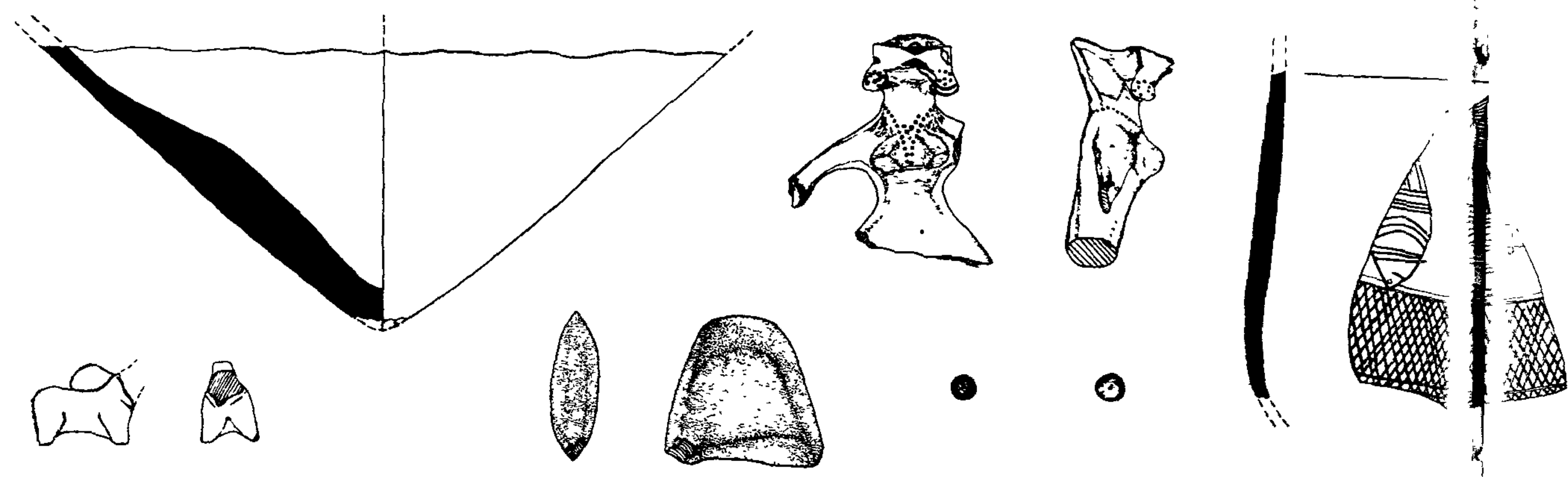
PERIOD II



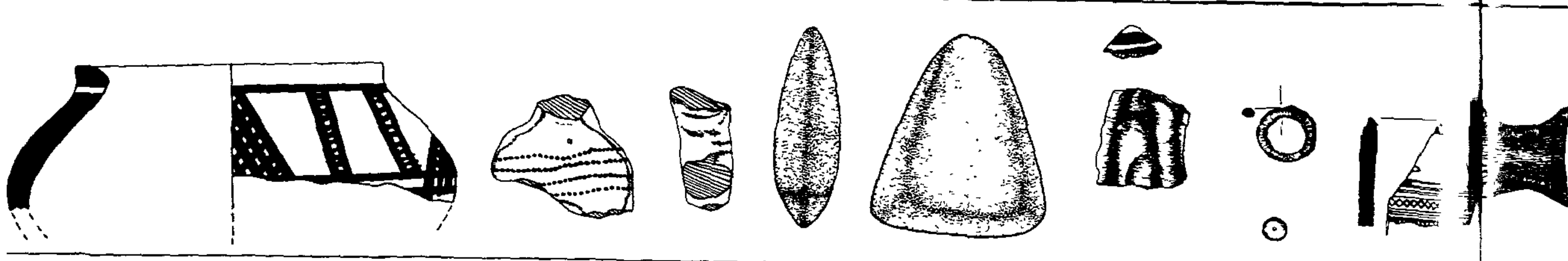
The northern Section of Trench No. IC. This is a partial view of the entire northern section as stratified during excavation at Pandu Rajar Dhibi in 1963.

Layer (1)—Surface humus grayish loose soil containing *kankar* and sand.
Layer (2A)—Compact grayish brown soil full of brickbats.
Layer (2B)—Compact grayish soil with ash, charcoal, potsherds and nodules of brickbats.
Layer (2C)—Slightly loose grayish earth with potsherds and nodules of brickbats.
Layer (2D)—Slightly loose earth with few brick-bats. The patch belongs to rubble-pavement.
Pit by (2C)
Layer (3A)—Less compact brownish earth with potsherds and brickbats.
Layer (3C)—Patch of ash with fragments of pottery.
Layer (4)—Loose sooty gray sandy soil with scattered mottles.
Layer (5)—Greenish white loose earth with ash, charcoal and patches of slightly compact earth.
Layer (5A)—A thin patch of burnt earth. Sherds.
Layer (6)—Buffish silty sand with occurrence of mottles and scanty remains of ash, charcoal and pot-sherds.
Layer (6A)—Silty sand with charcoal and patches of slightly compact earth mixed with ash
Layer (6B)—Loose earth of dark gray colour with dots of charcoal, ashes and fragments of pottery.
Layer (7)—Compact mottled silty sand.
Layers of Periods I & II revealed human cemetery.

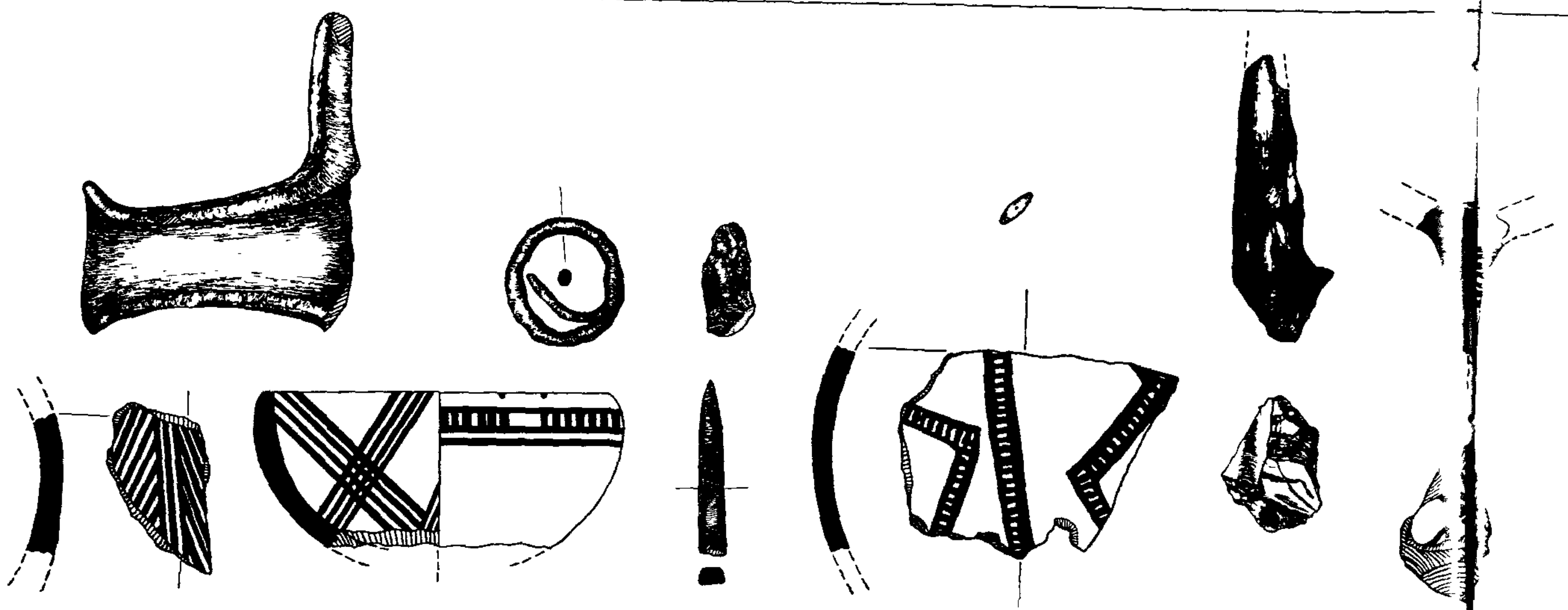
I

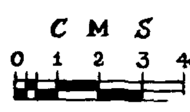


V



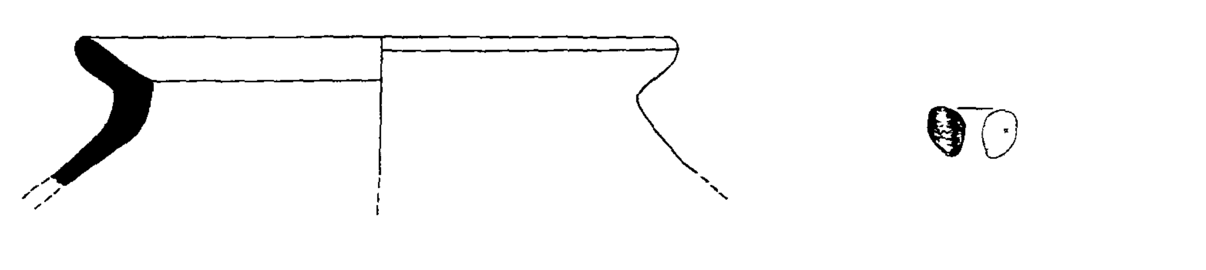
V



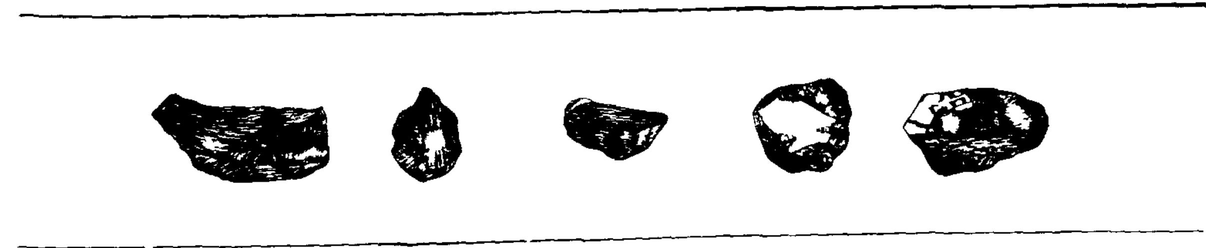


DRAWN BY E. D. SAMPSON

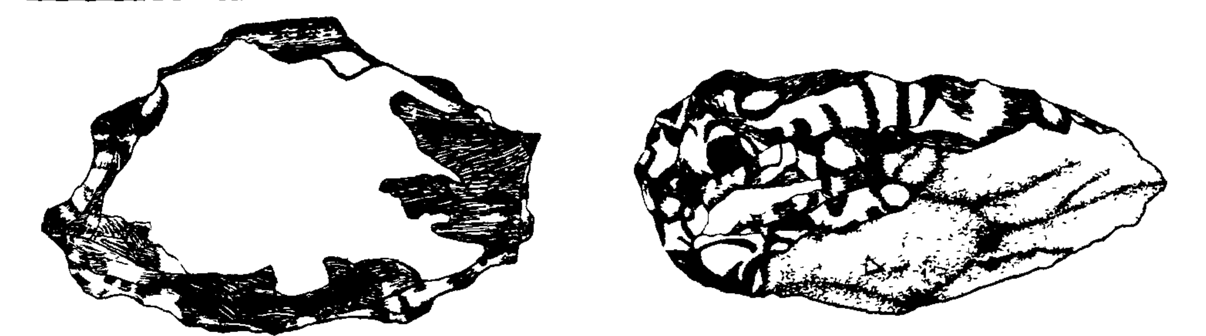
THE CULTURAL SEQUENCE IN THE AJAY VALLEY



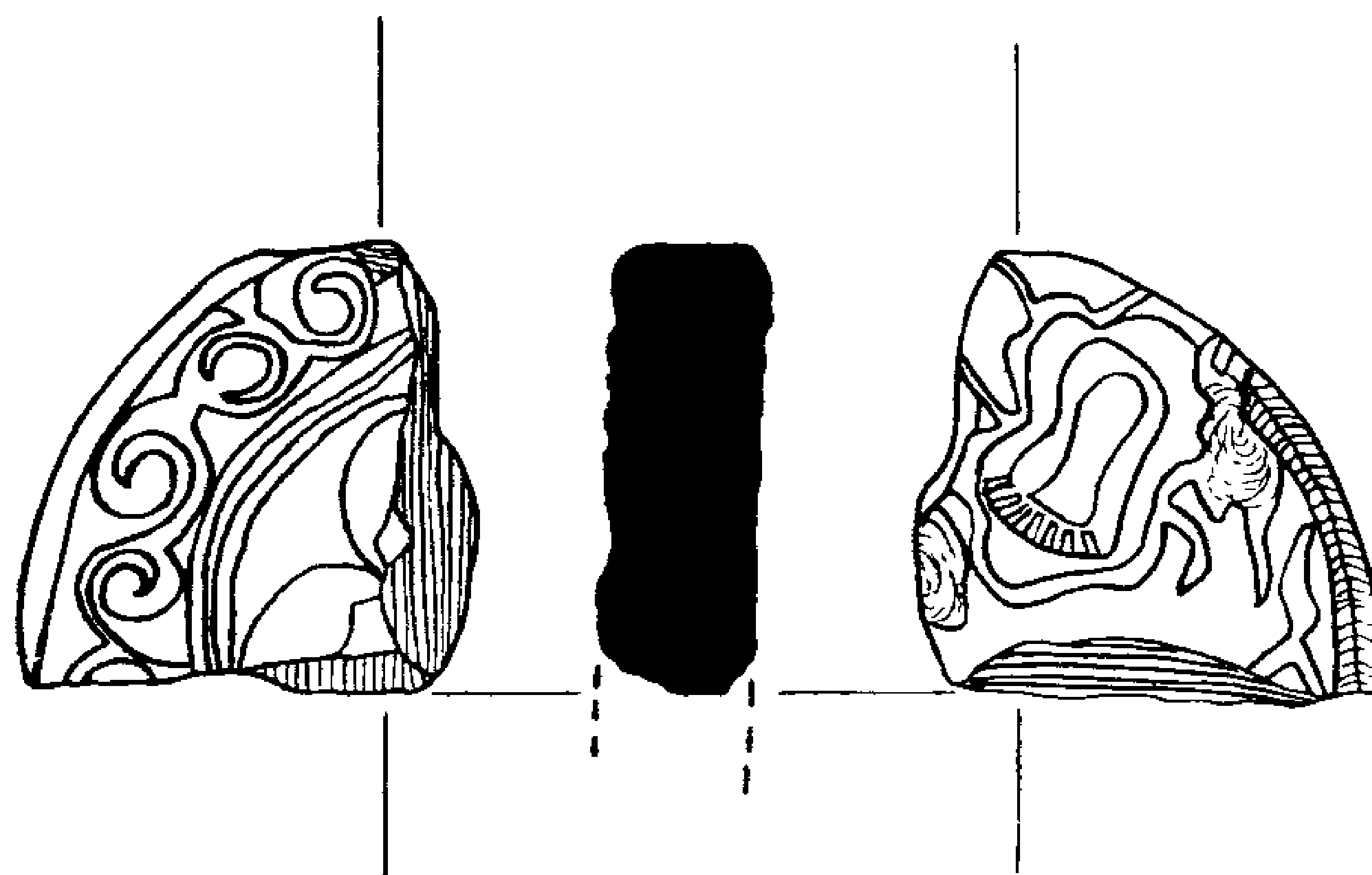
III



II



I



Mutilated stone rounded carved with
spirals and unknown cult (?) motifs.
PERIOD II

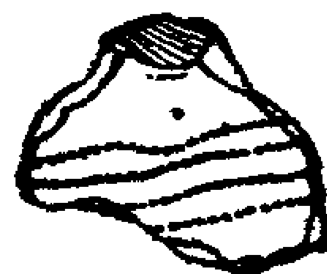
Postscript

The archaeological findings from Deulpota (vide, *supra* pp. 21-22) about six miles north of Diamond Harbour on the right banks of the Ganges or Bhagirathi indeed throw an important light on the proto-history of deltaic Bengal by revealing certain connection with the civilisation of *Pandu Rajar Dhibi*. It may be recalled that apart from the already mentioned beaked jug and a lipped bowl evidently having a short channel spout recalling the civilisation of the Ajay Valley, the repertoire of antiquities collected from here include the rim-portion of a copper or bronze vase with floral decoration as also a miniature ship with an open deck and a set of several amulets recalling Egyptian *scarabs* of the same metal. One of the copper beetles will reveal a faint line of cartouche on the reverse where it might be impossible to put an inscription due to the presence of double [illegible]. Apart from all these antiquities a ground amulet of the spine-bone of some [illegible] also seems to be an interesting find like others suggesting many [illegible].

Here it may be recalled that according to Donald A. Mackenzie "The idea that a spine was a charm for stability in life and death is probably of great antiquity. Spines of fish were laid on the bodies of the dead in Palaeolithic times. In Crete the necklaces made from the vertebrae of an ox, or sheep, had no doubt, a magical significance. The Ligurian and Cretan Neolithic people who carried home portions of the back bones of whales may have believed that by doing so they prolonged their lives and charmed their dwellings against attack and disaster" (*Myths of Crete & Pre-Hellenic Europe*, pp. 306-07).

Among other antiquities may be mentioned an amazingly large number of patinated chert tools of Series II and microliths (*supra* p. 21) including a small transverse blade evidently for hafting on a rectangular handle or stick for cutting cereal grasses, a few archaic terracotta figurines, one representing an elephant, and a small round coin of what appears to be bronze with a primitive human figure on the obverse and striation on the reverse. While the "sickle-tooth" maintains a lustre or polish on the edge obviously due to long use, this coin is no doubt unique in Indian numismatics and it obviously recalls the striated coins of Lydia and Ionia in about 700 B. C. (vide J. B. Bury : *History of Greece*, fig. 19 : J. G. Milne : *Greek And Roman Coins*, London, 1939, Plate 1,1). In view of the primitive human figure comparable with similar figures occurring on a terracotta sealing of proto-historic origin (now preserved in the Asutosh Museum, Calcutta from the

neighbouring site of Harinarayanpur situated about a dozen miles south of Diamond Harbour this coin from Deulpota seems to appertain to an unknown age centuries before the opening of the Christian era and perhaps long before the age of the Punch-Marked coins in India. Any how, the occurrence of a striated coin may have an interesting history of an ancient contact with the Mediterranean world before the Classical epoch. In this connection may be mentioned a fragmentary terracotta rosette encircled by a row of chevrons (radius : 4 cms) from the level of Period II of *Pandu Rajar Dhibi* with an incised lotus on the concave reverse. This characteristic rosette is very much comparable with the excavated ceramic rosettes from certain rock-cut tombs in Cyprus where they were once regarded as the symbol of "Life and Fertility" (V. Karageorghis : *Rock-cut Tombs of The Cellarka etc.* Part II *Illustrated London News*, September 5, 1964 p. 332, fig. 1). In the light of all these discoveries it may be revealed that the buried chalcolithic cities and habitations of the Ajay and Lower Bhagirathi valleys had overseas relation with the Bronze Age Mediterranean world the inland routes obviously combining at Katwa probably mentioned as *Katadupa* by Arrian about two thousand years ago.



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No. 3. Jashpur, dt. Birbhum.
No. 4. Surath Rajar Dhibi, dt. Birbhum.
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Collected by explorations.

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The photographs have been prepared by Sri Ranjit Sen of the Directorate of Archaeology, West Bengal apart from Nos. VI & X taken by Sri K. C. Das, Photographer, Archaeological Survey of India, Eastern Circle, and Nos. V & XXXII prepared by Studio Luce of Calcutta. The writer is further indebted to Sri Protul Sen, Surveyor, for determining latitudes and longitudes of different proto-historic sites and mounds in West Bengal.

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Index is kindly prepared by Dr. S. C. Mukherjee.